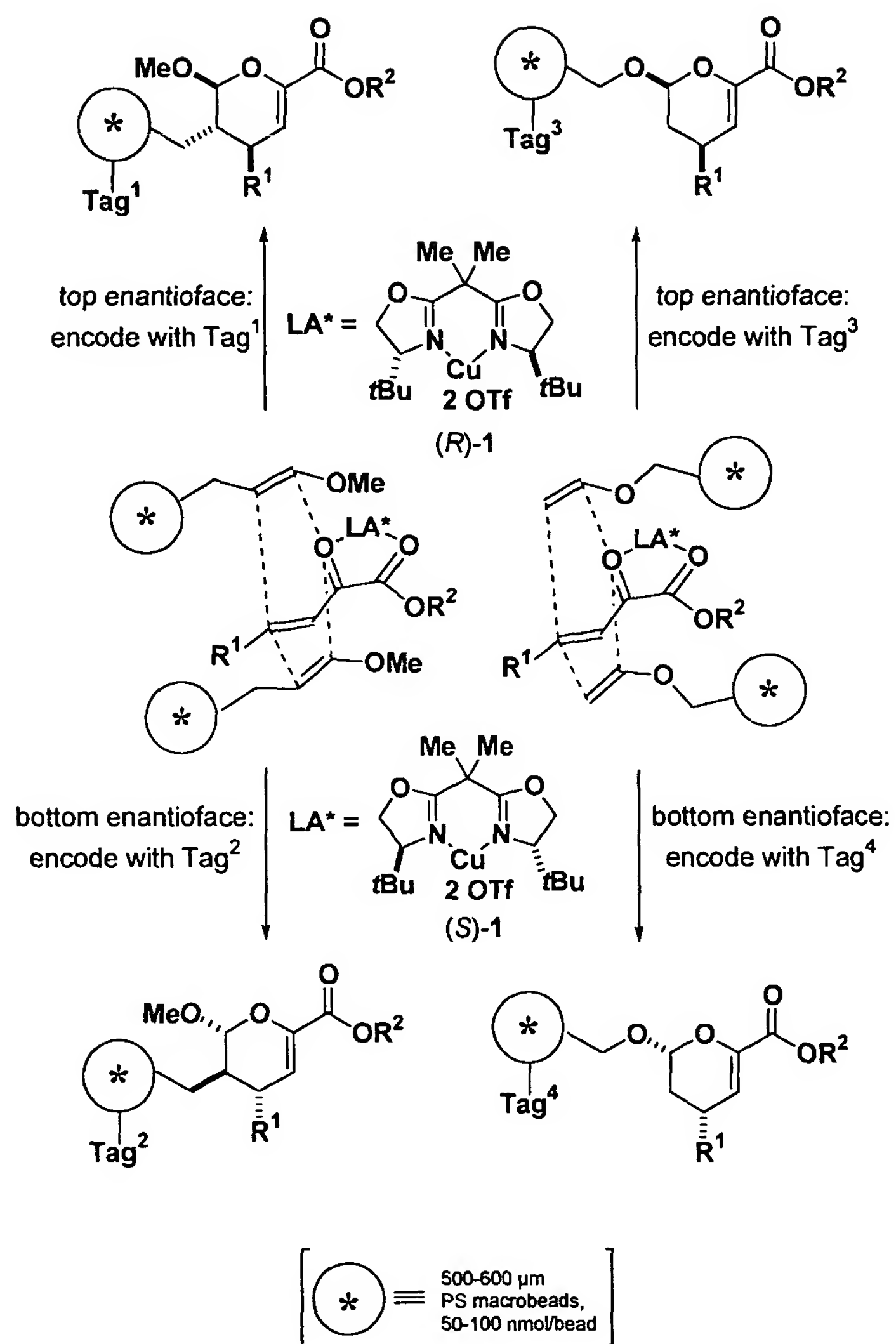
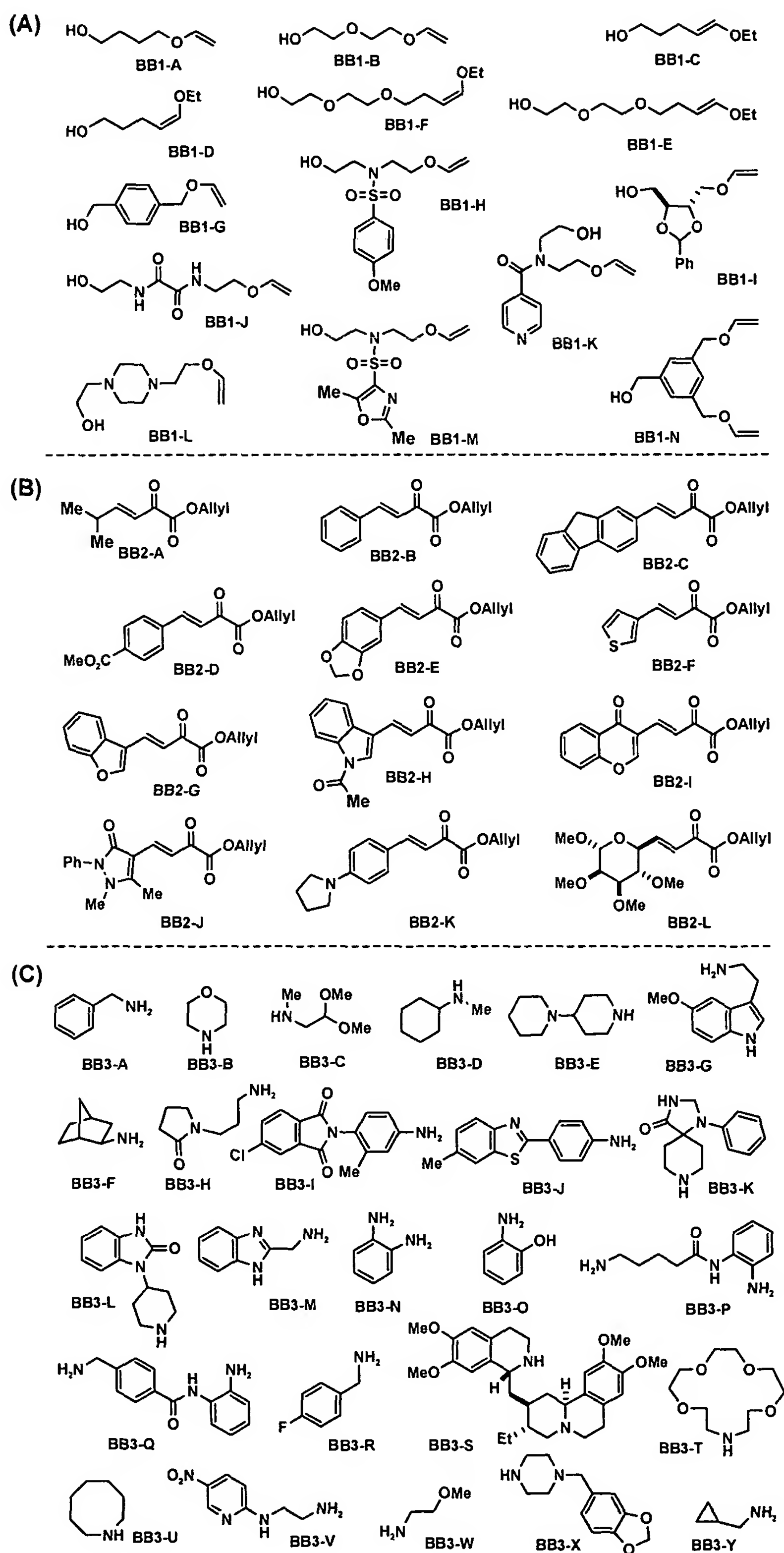


Figure 1



**Figure 2**



**Figure 3**

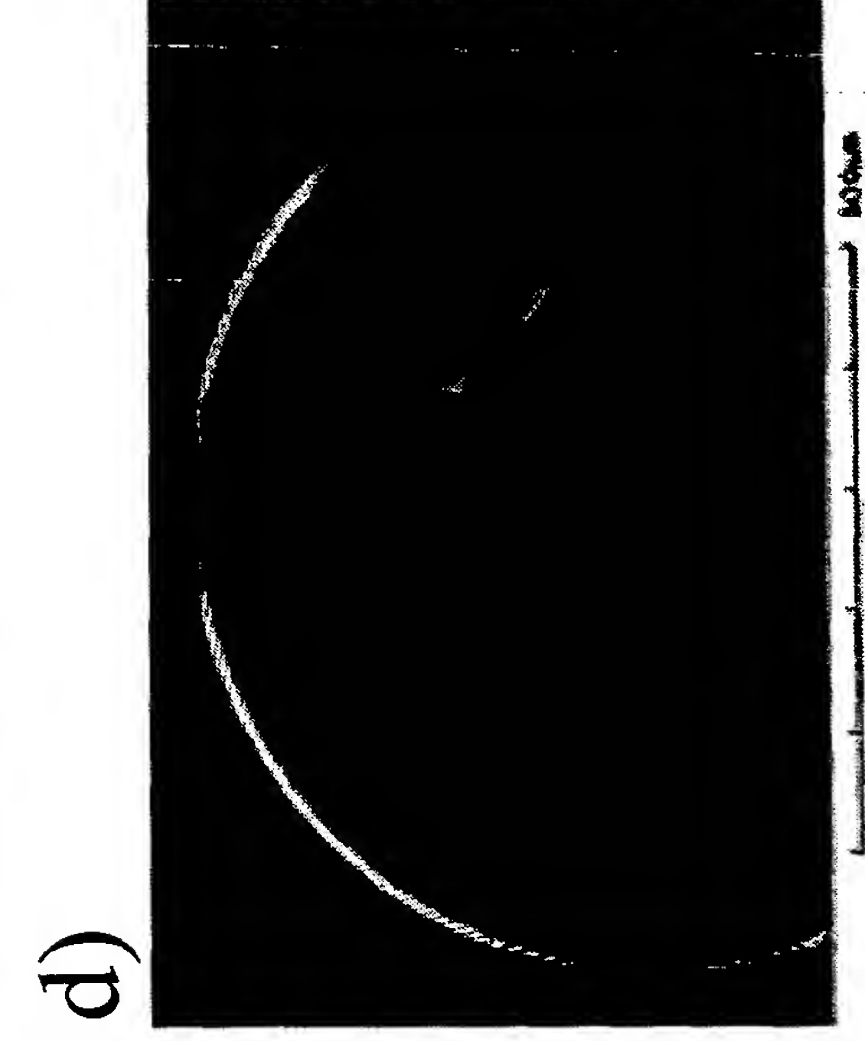
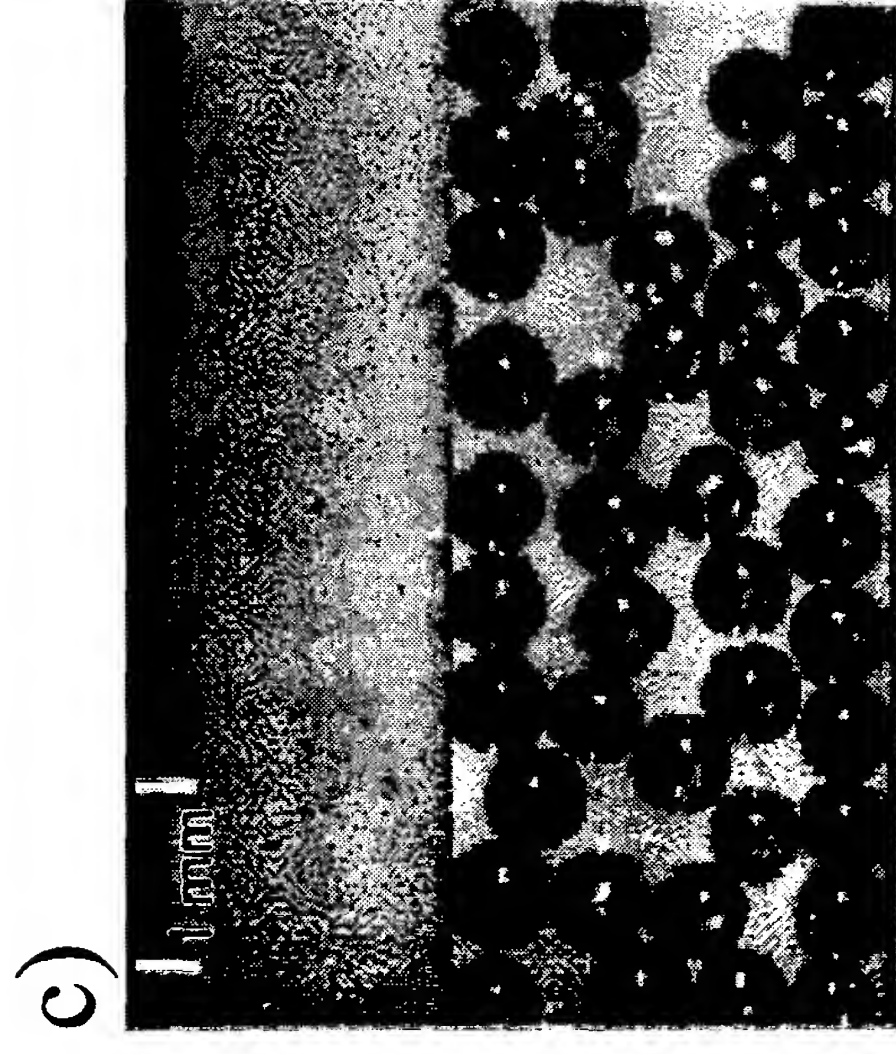
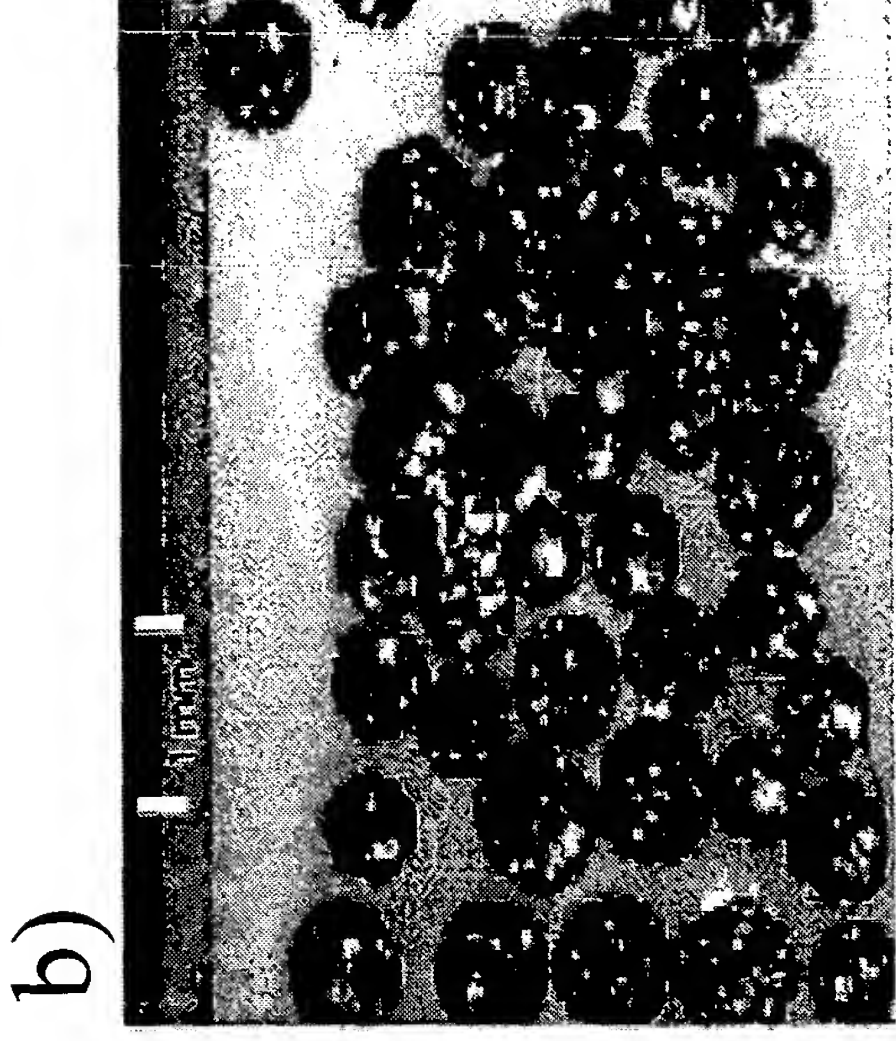
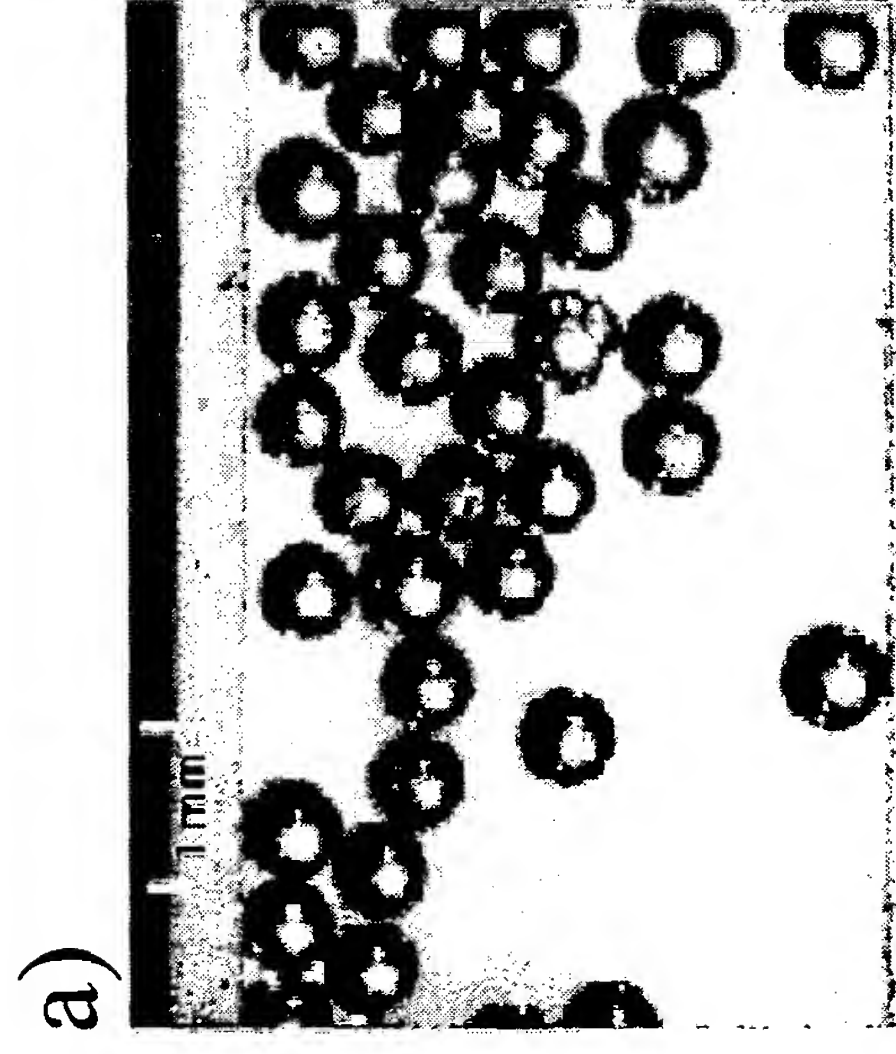
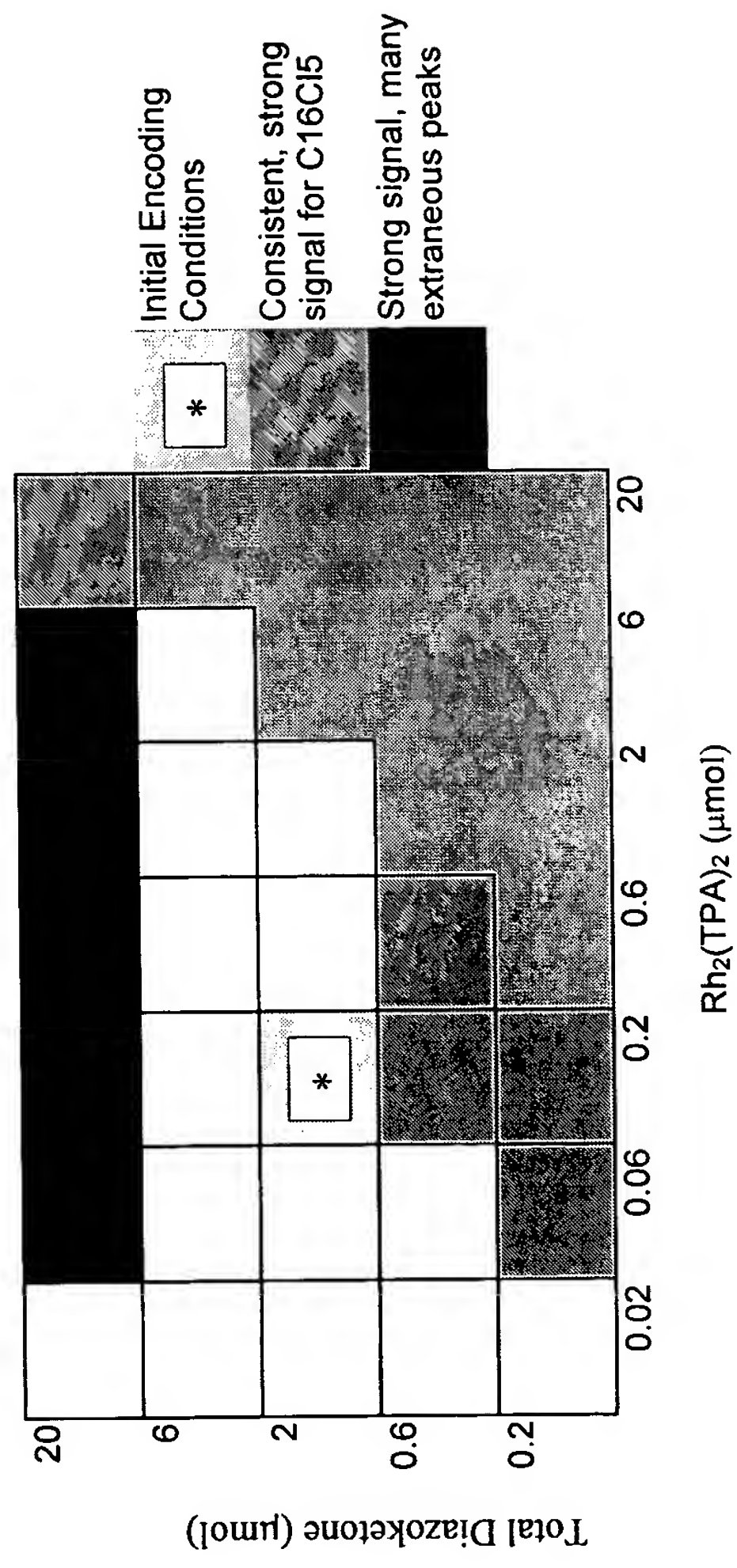
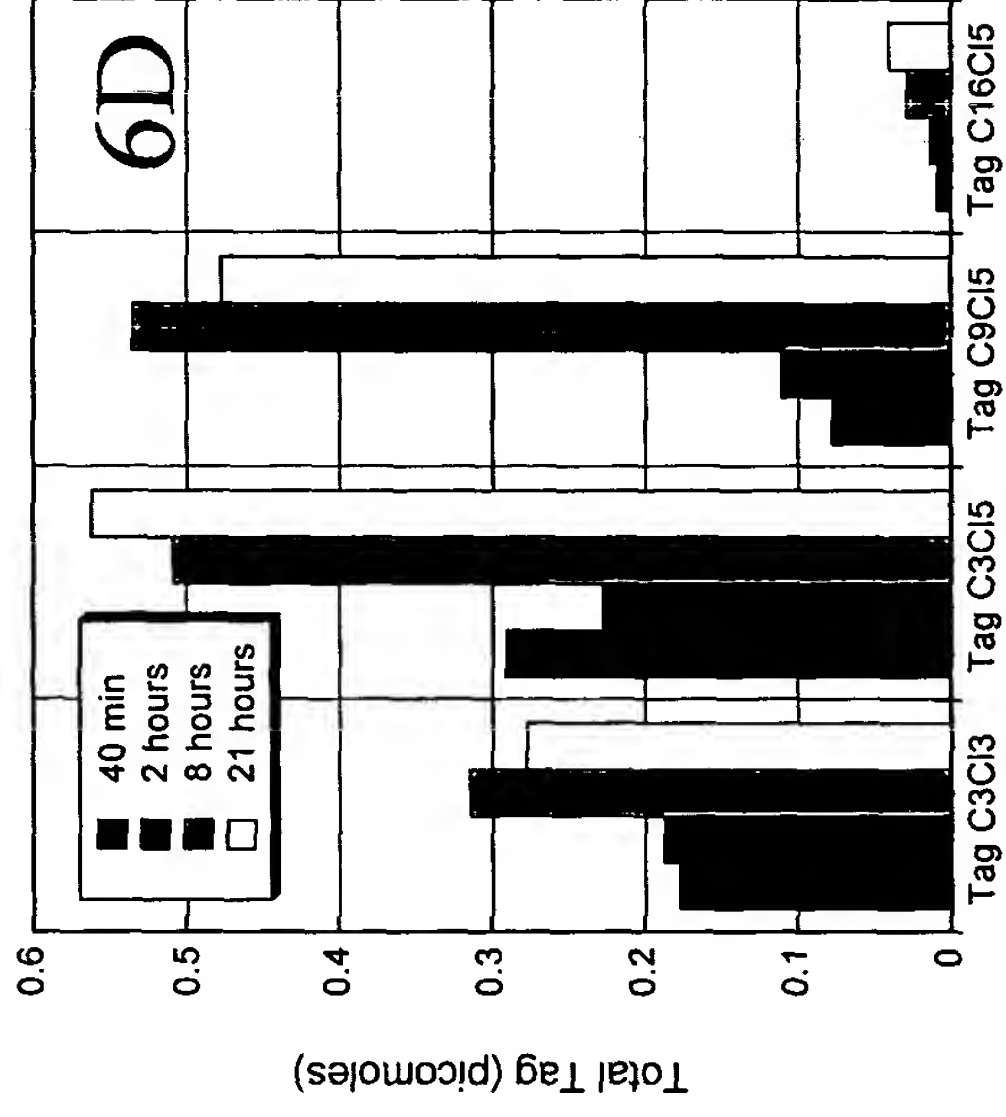
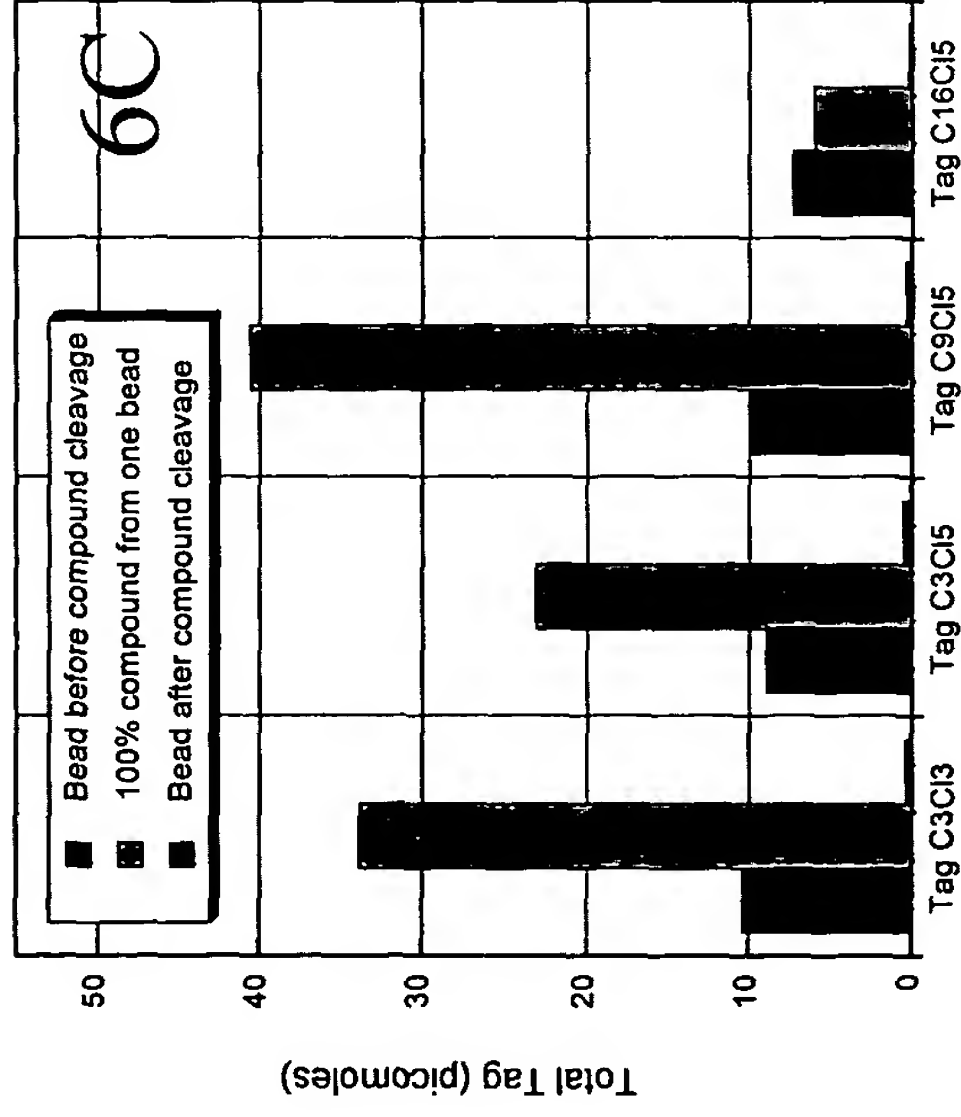
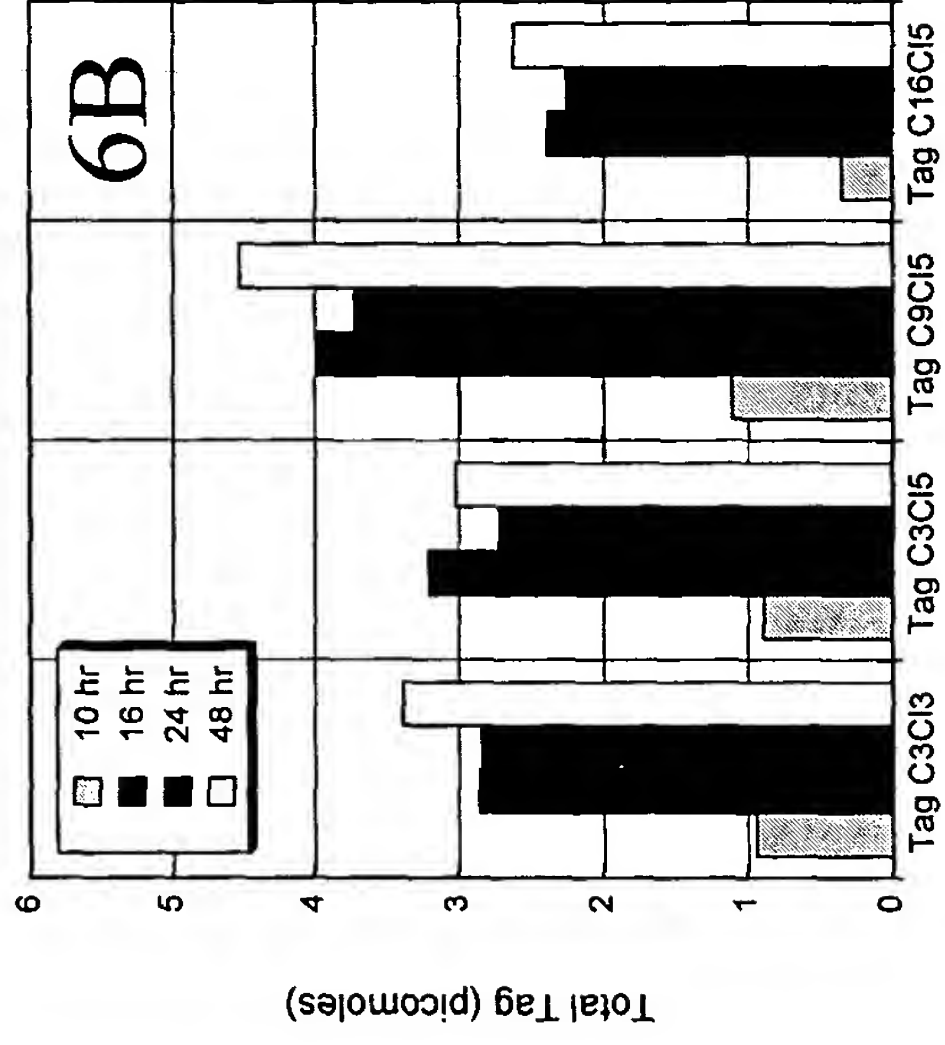
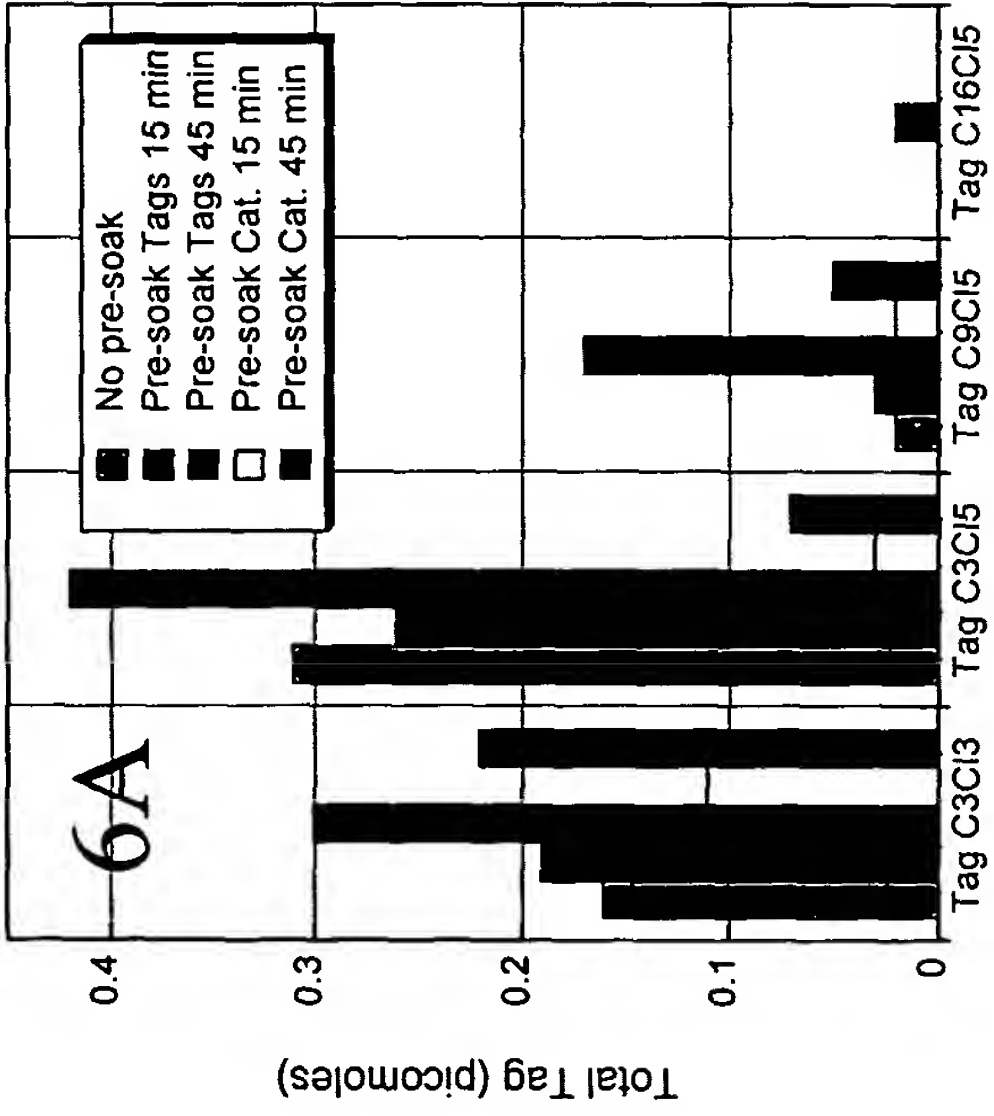


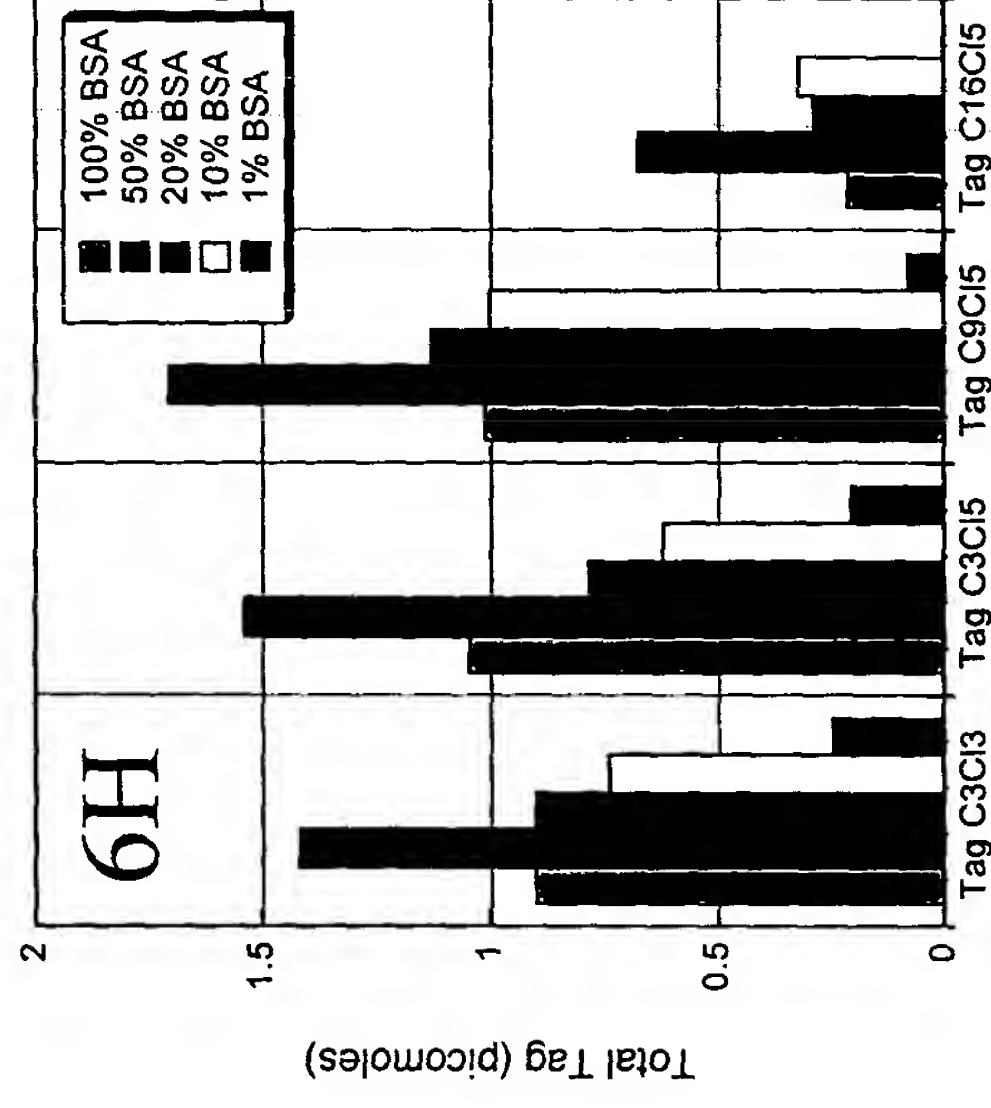
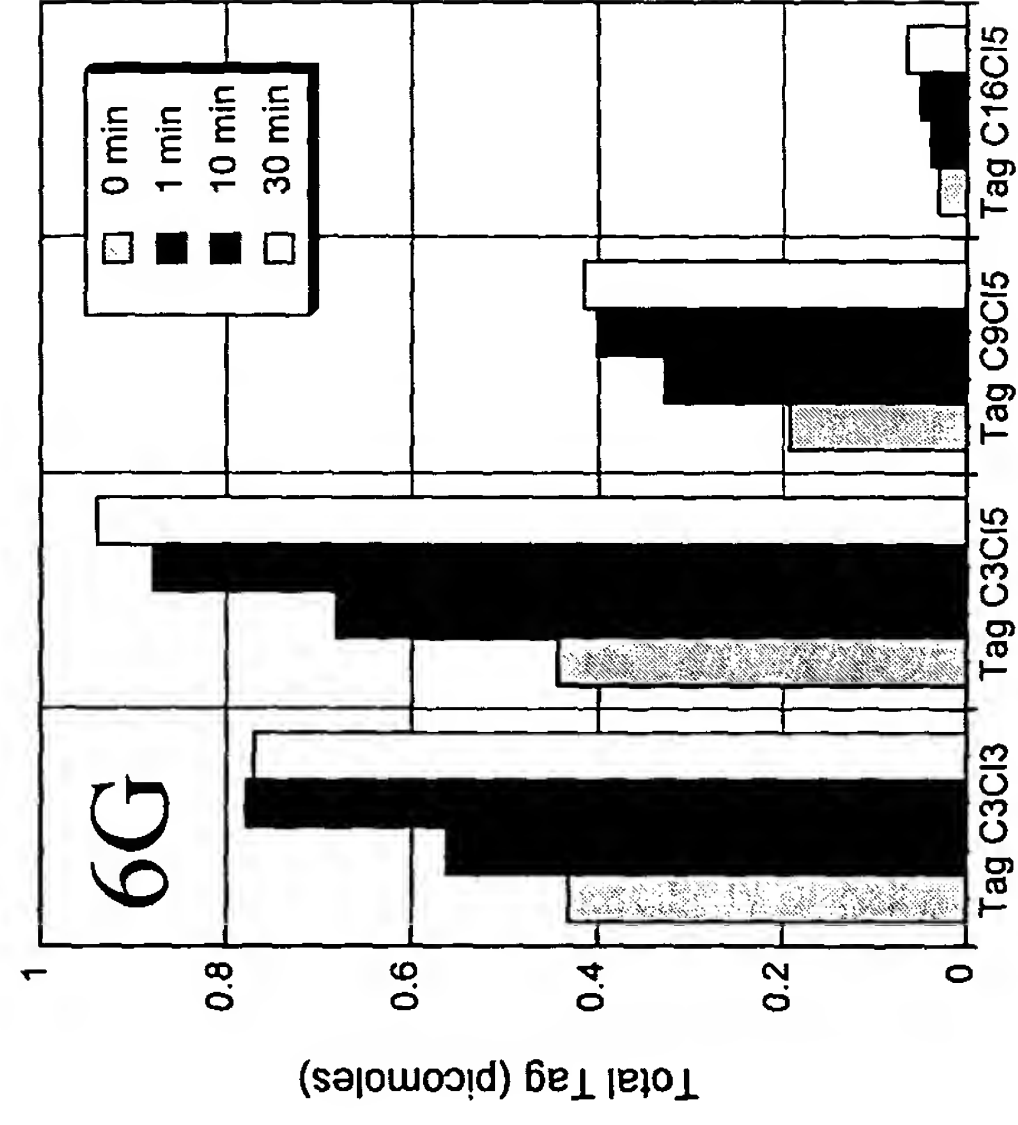
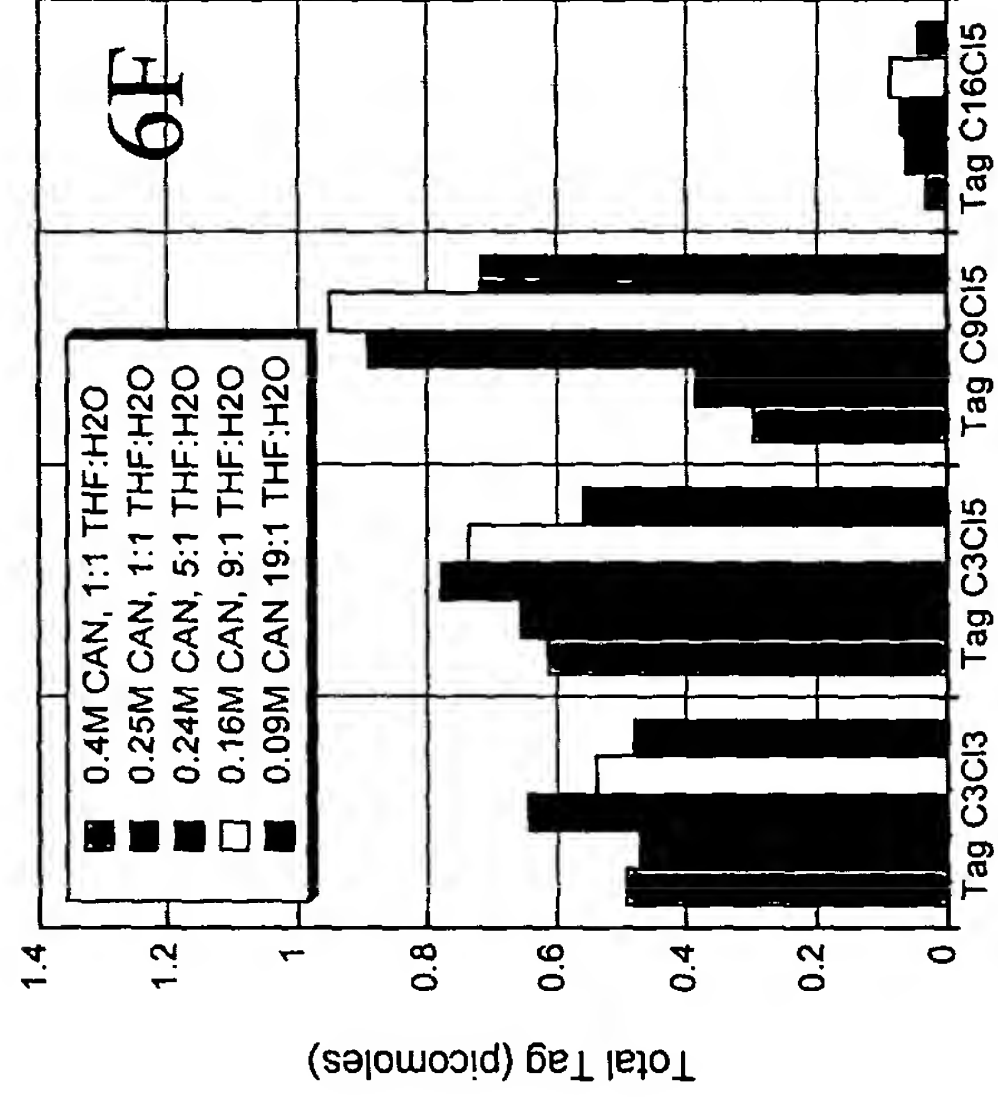
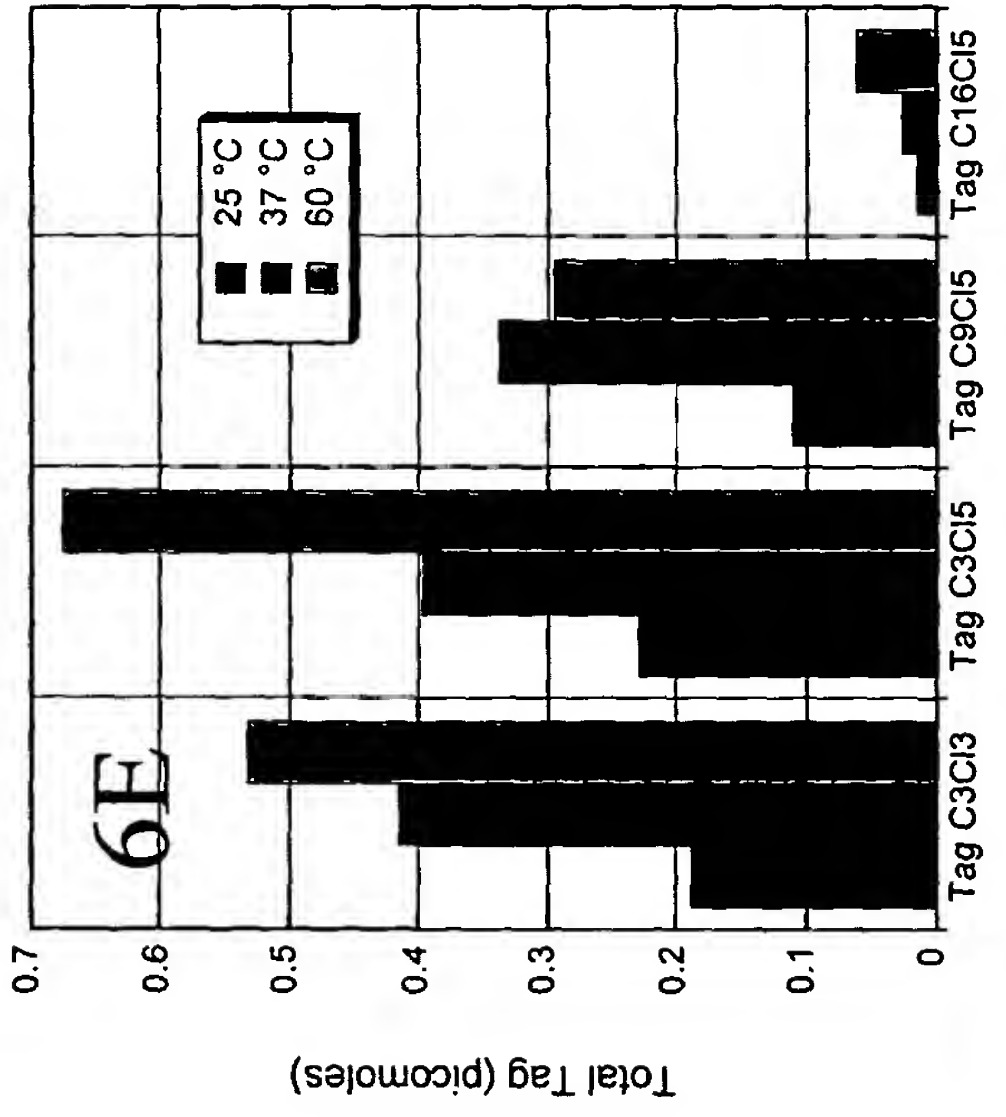
Figure 4



**Figure 5**



**Figure 6**



**Figure 6 (cont.)**



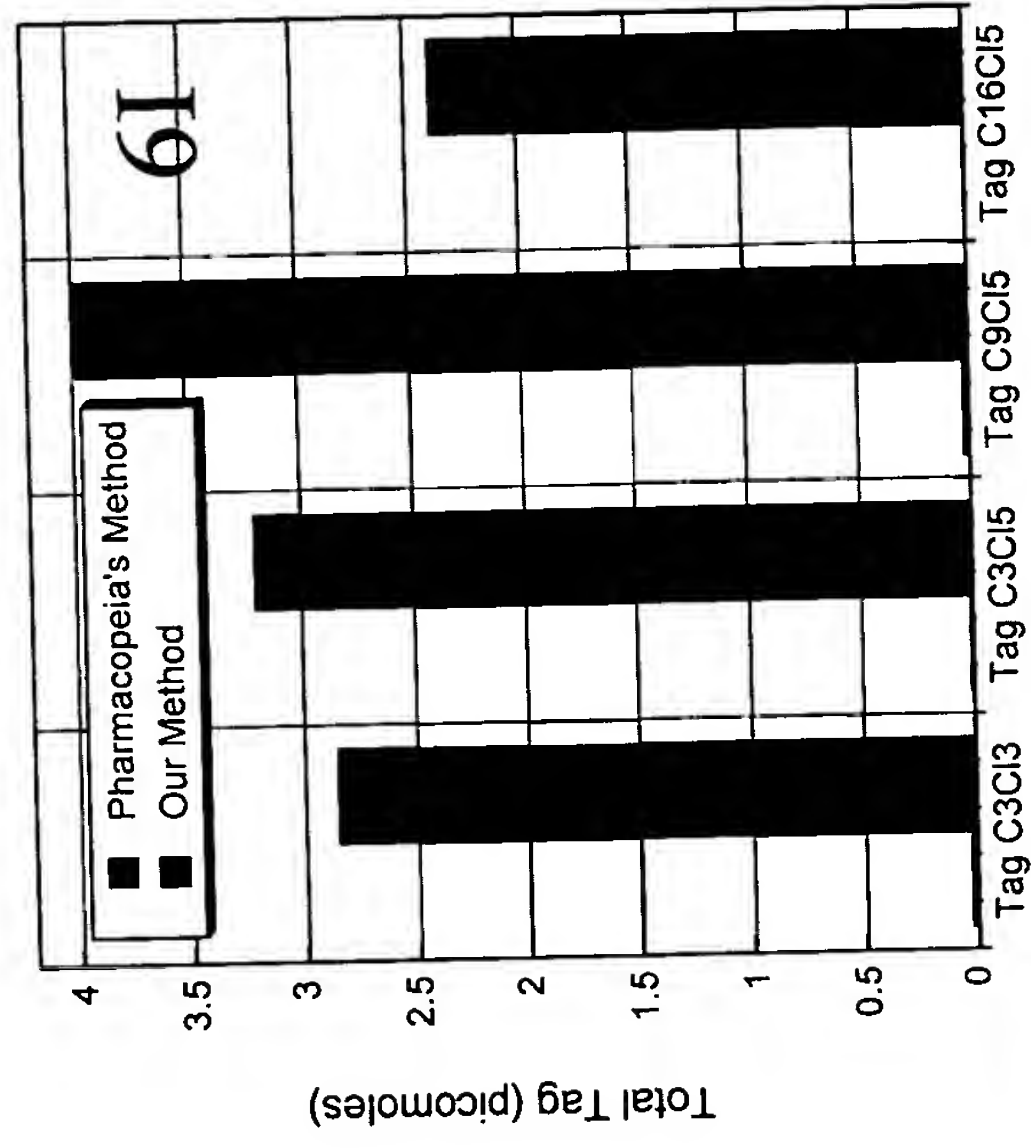
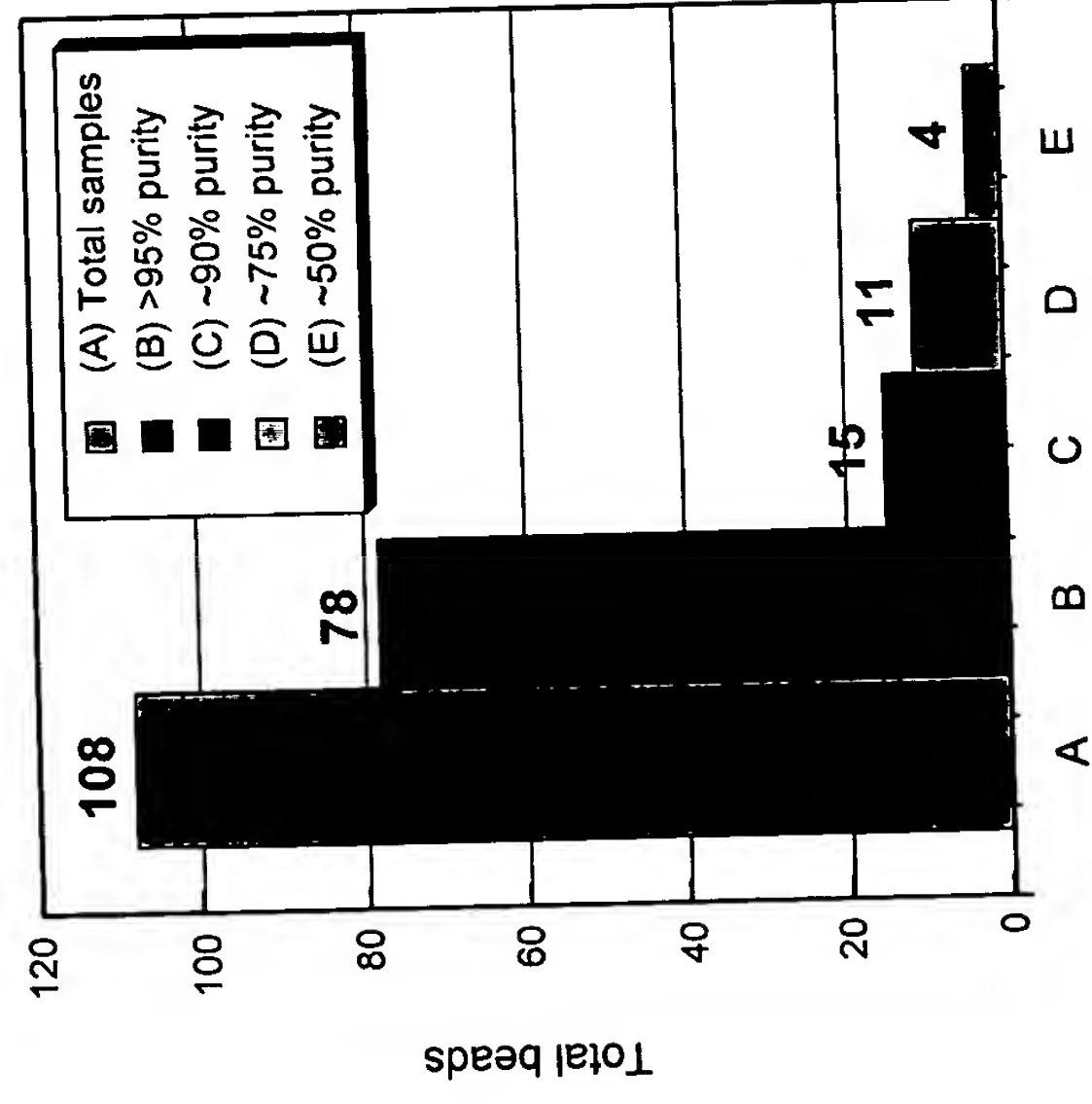
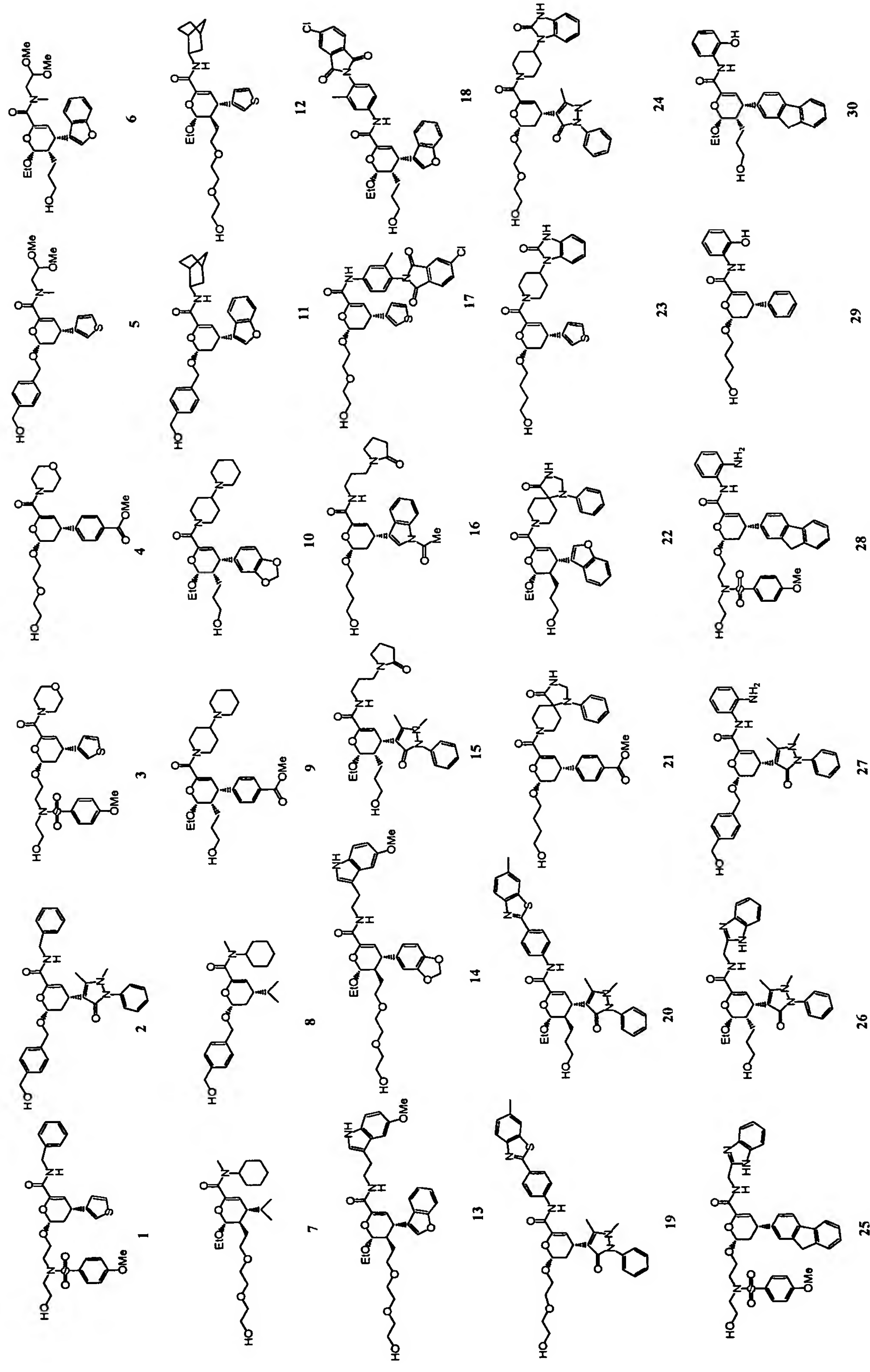


Figure 6 (cont.)

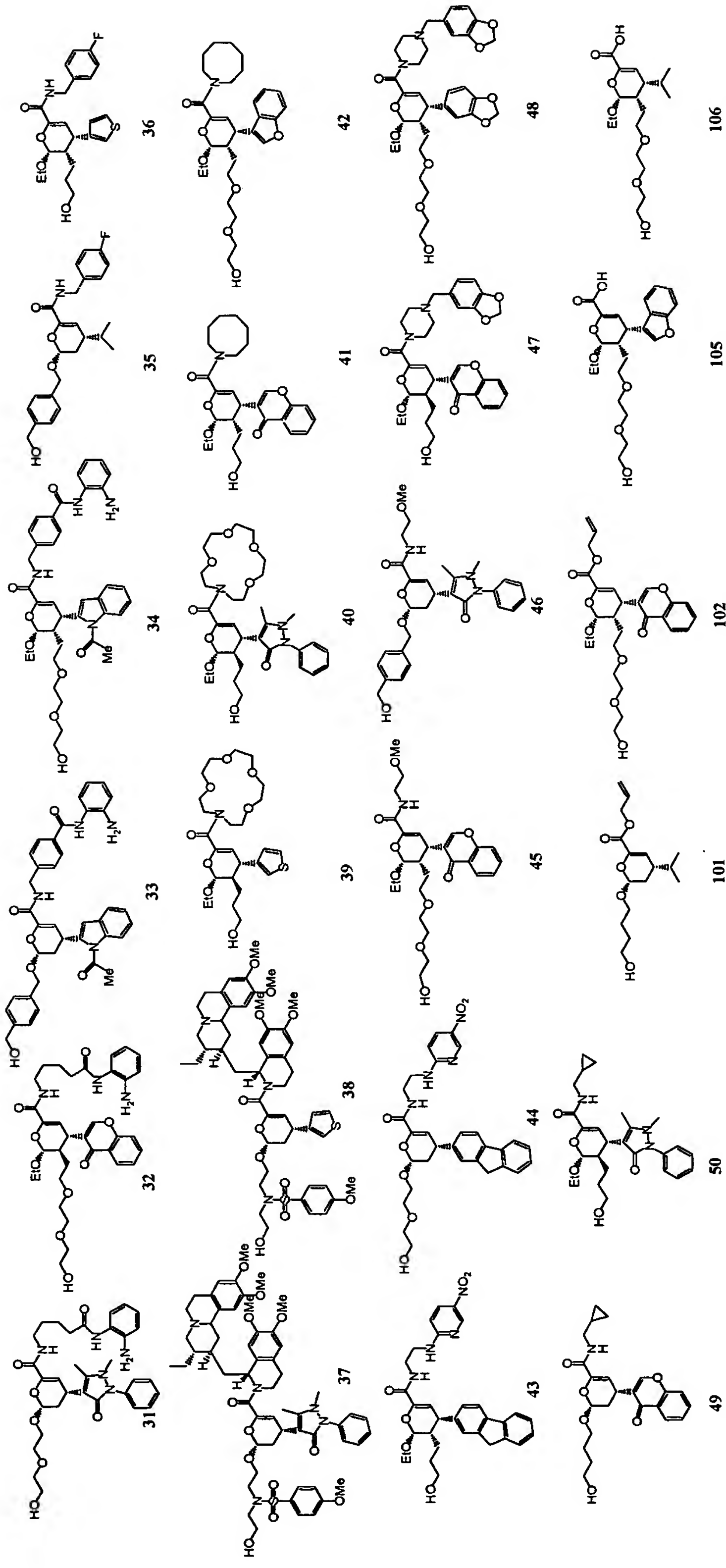




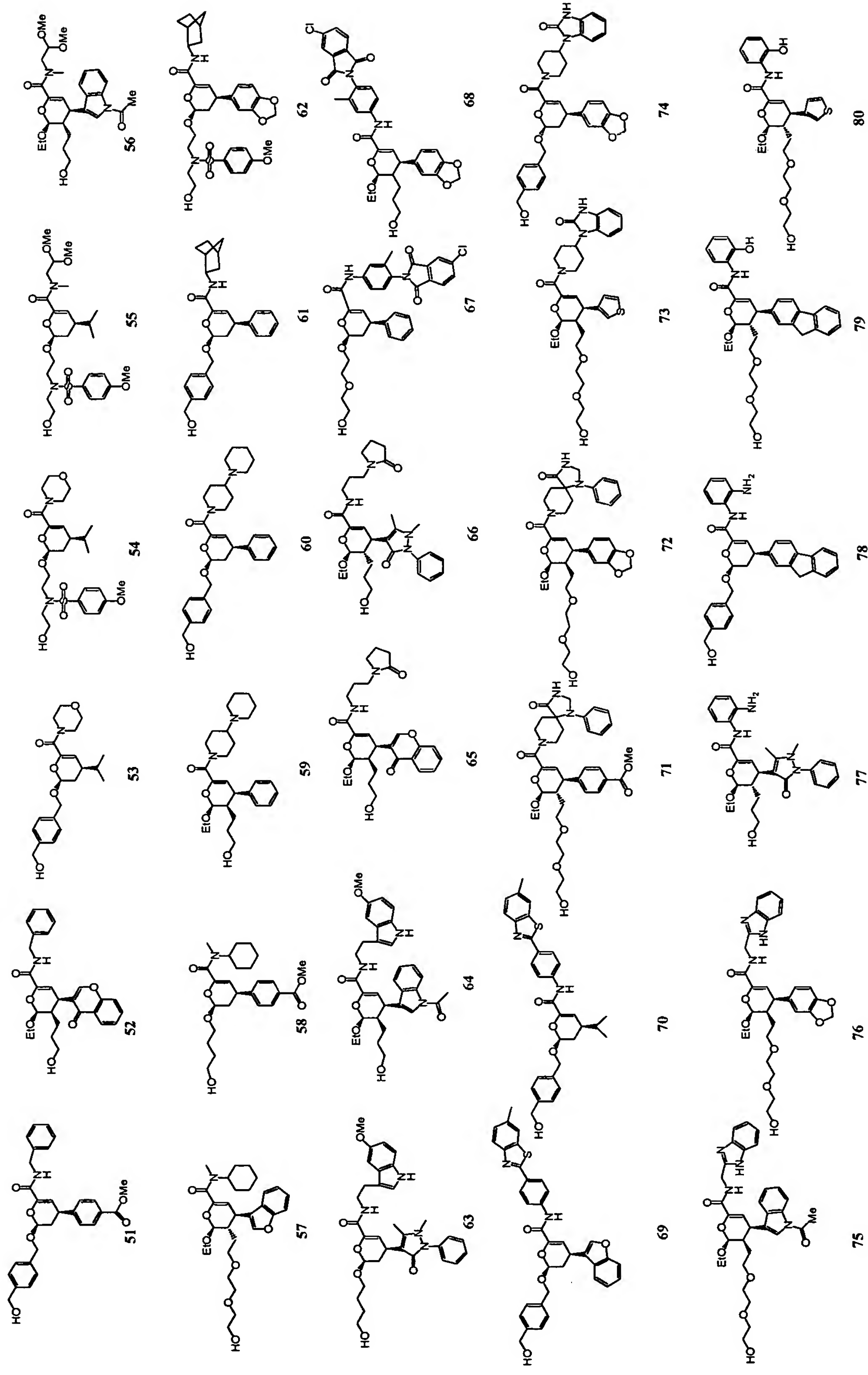
**Figure 7**



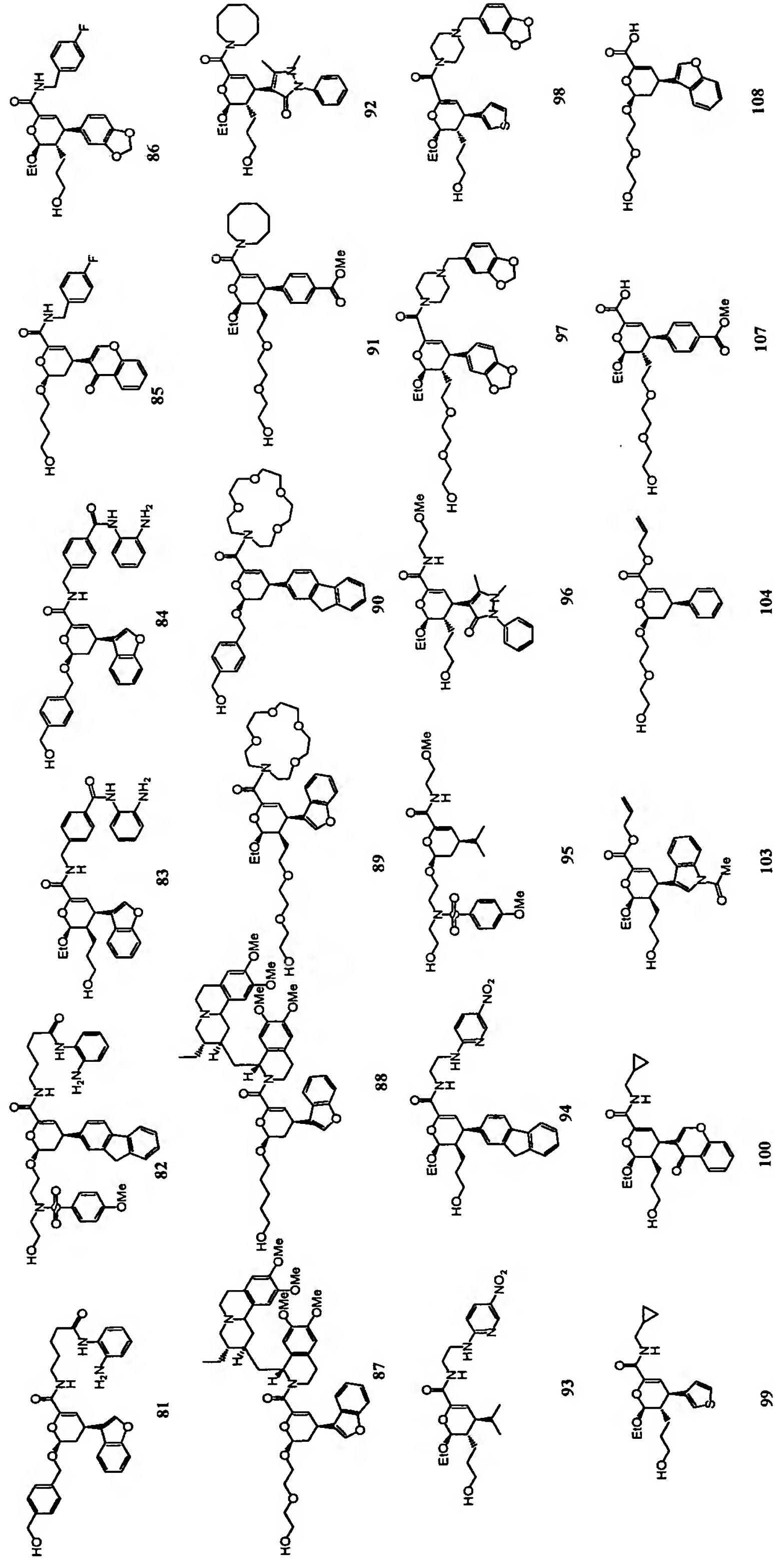
**Figure 8A**



**Figure 8B**



**Figure 8C**



**Figure 8D**

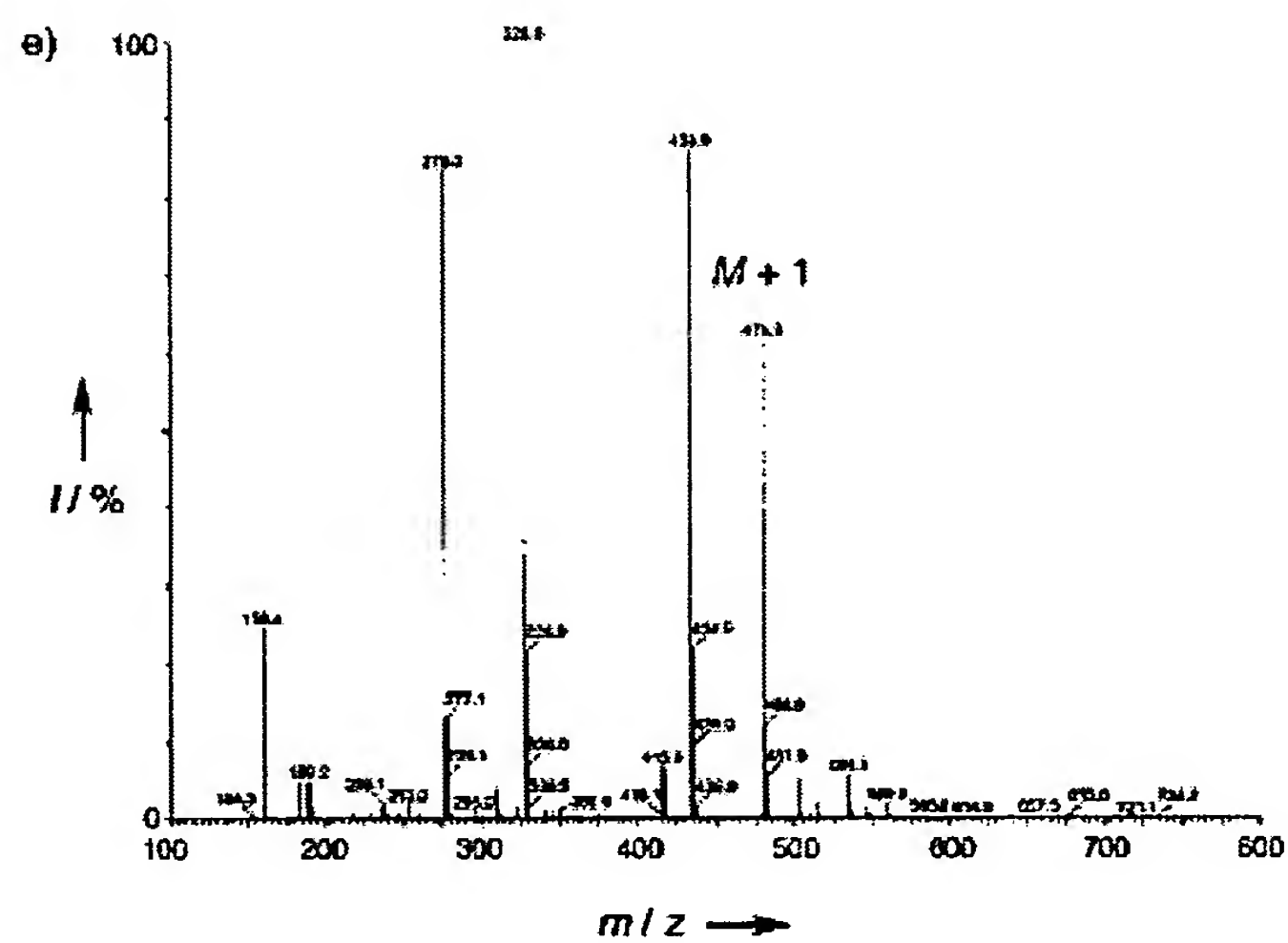
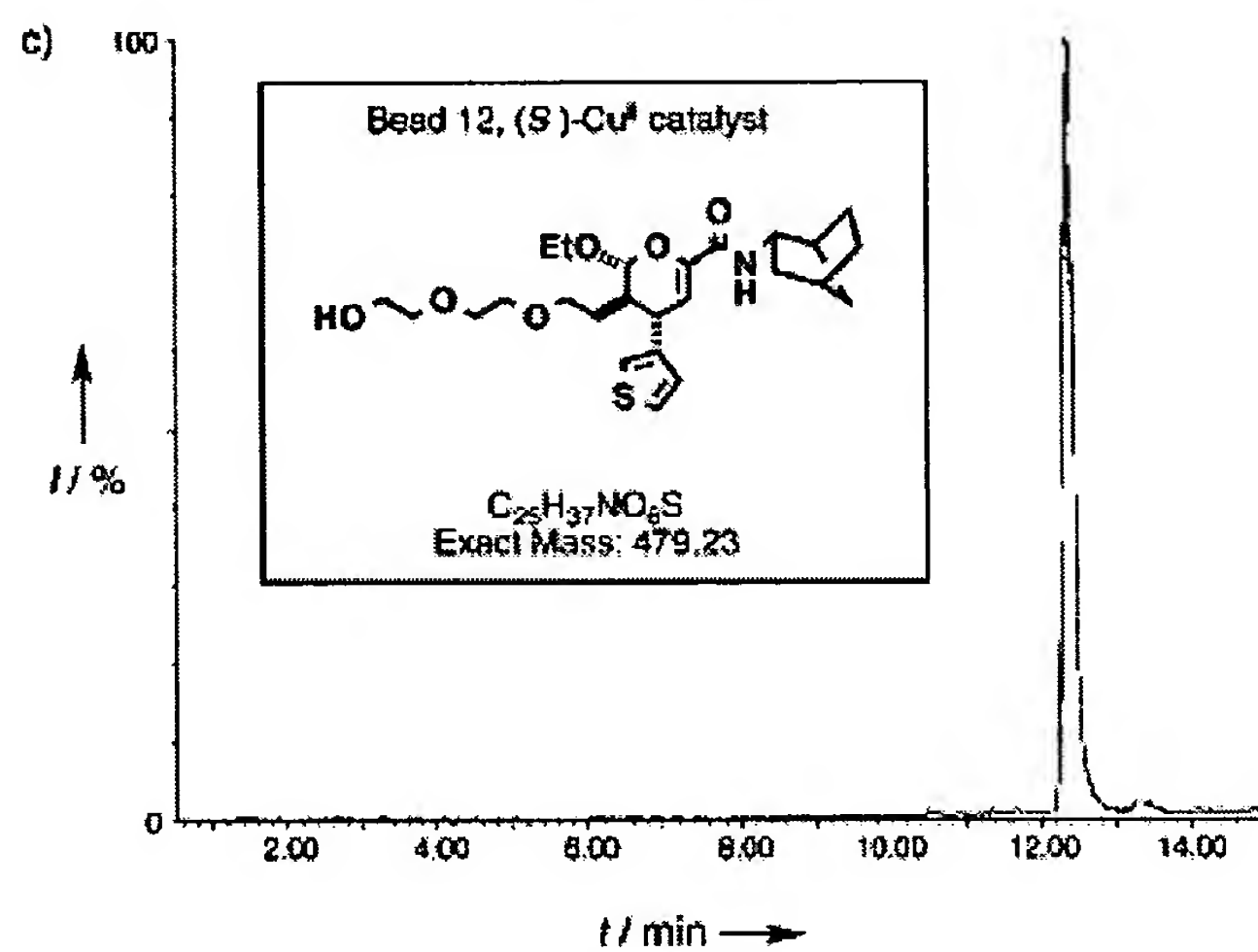
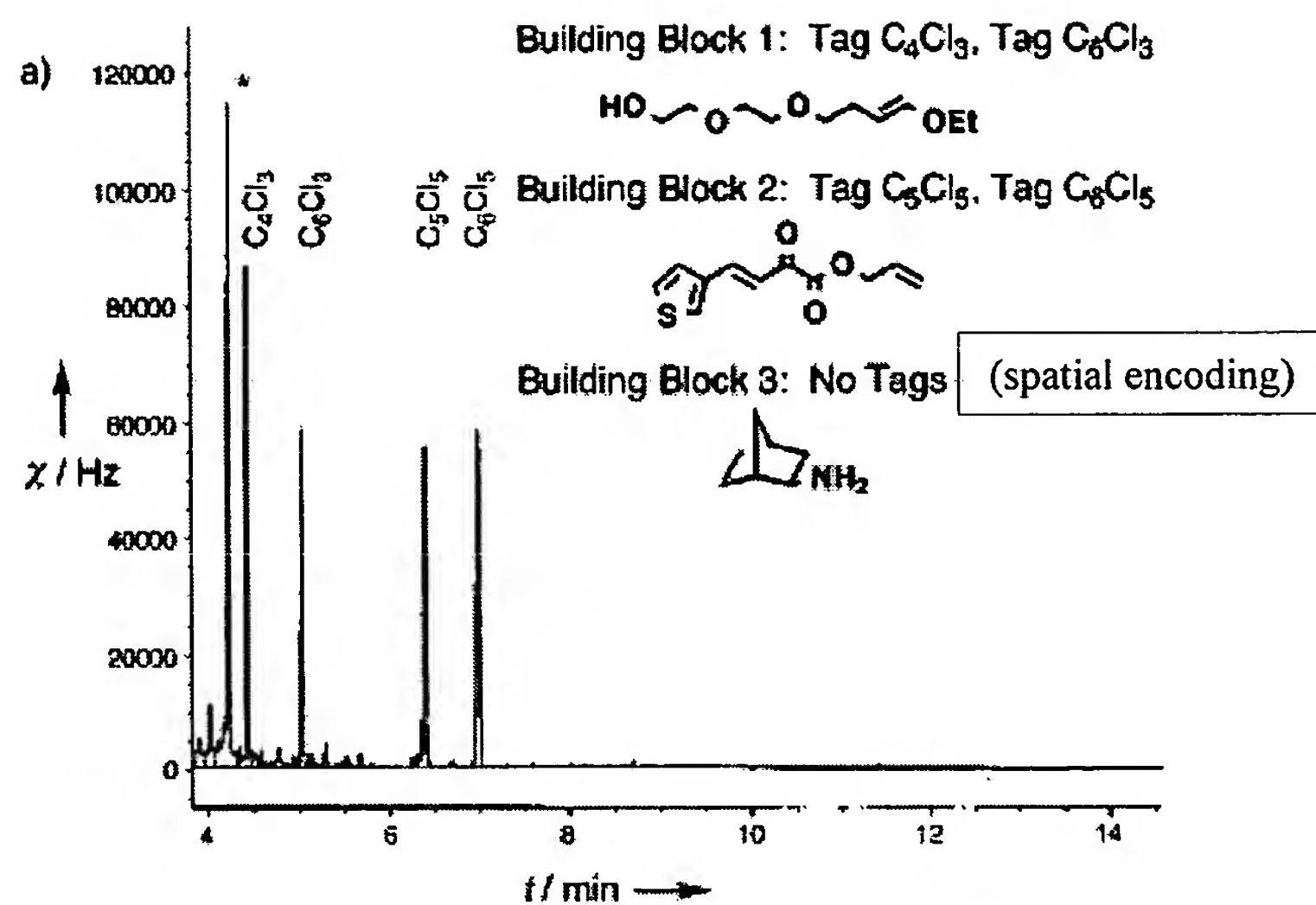
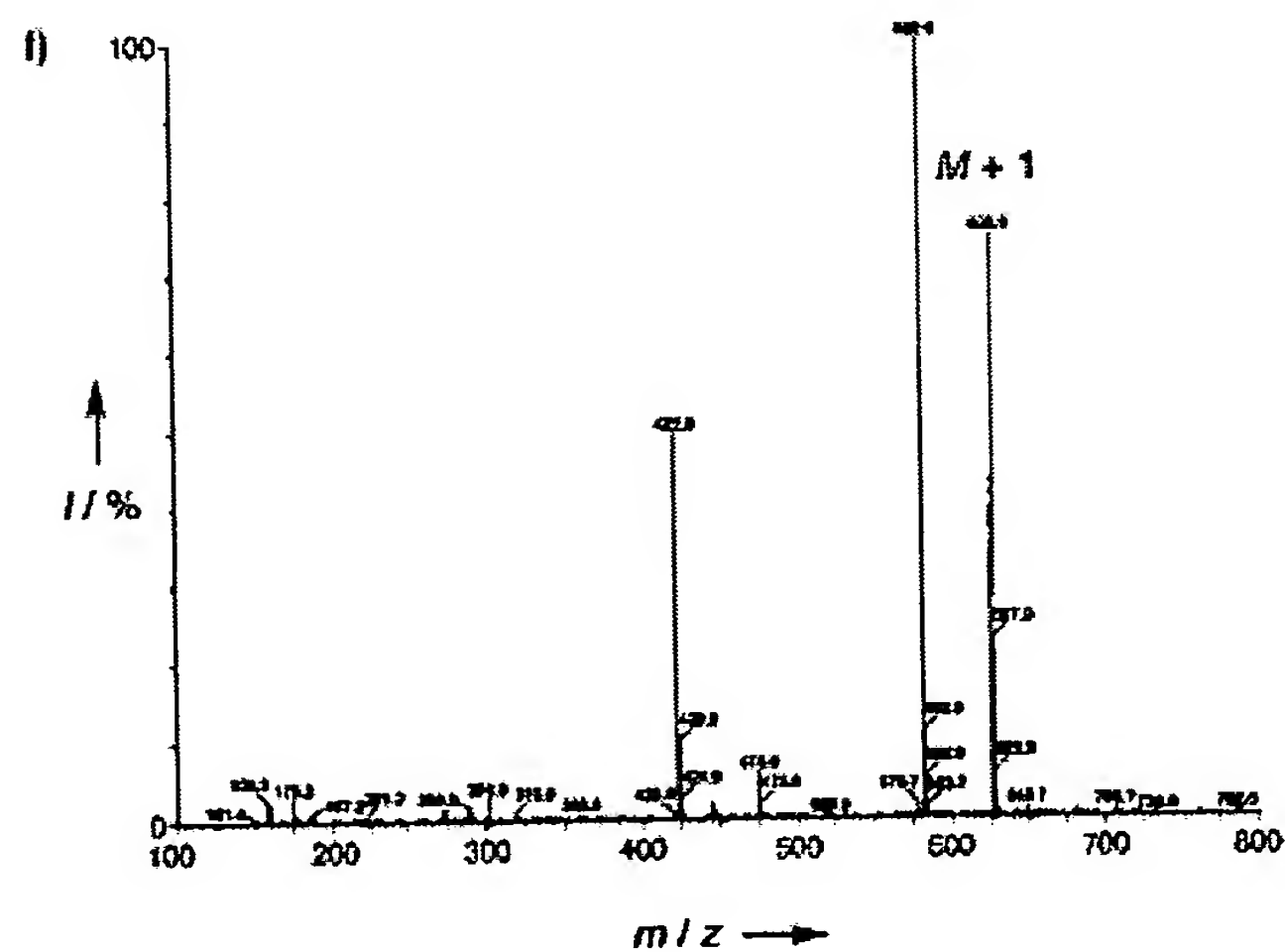
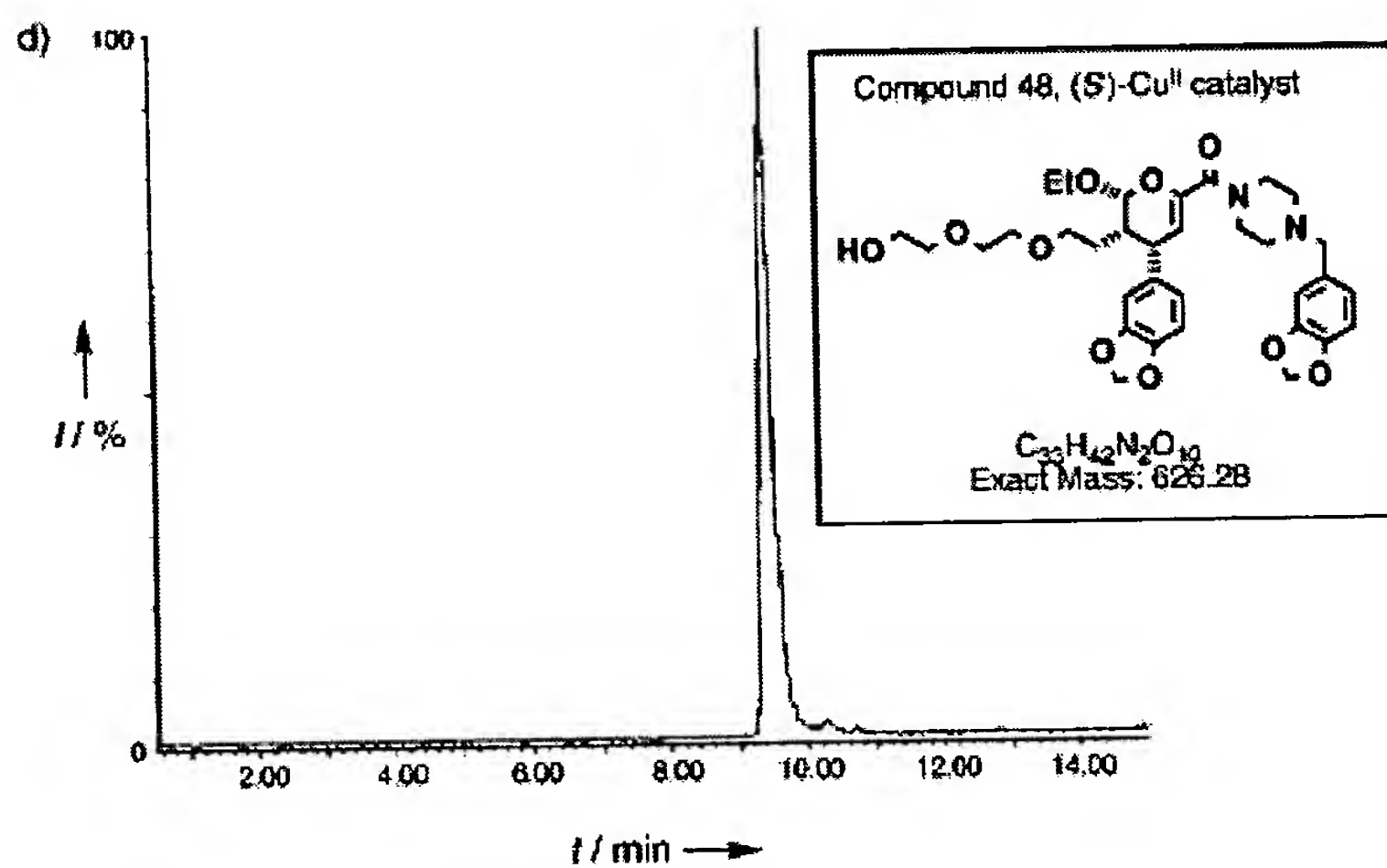
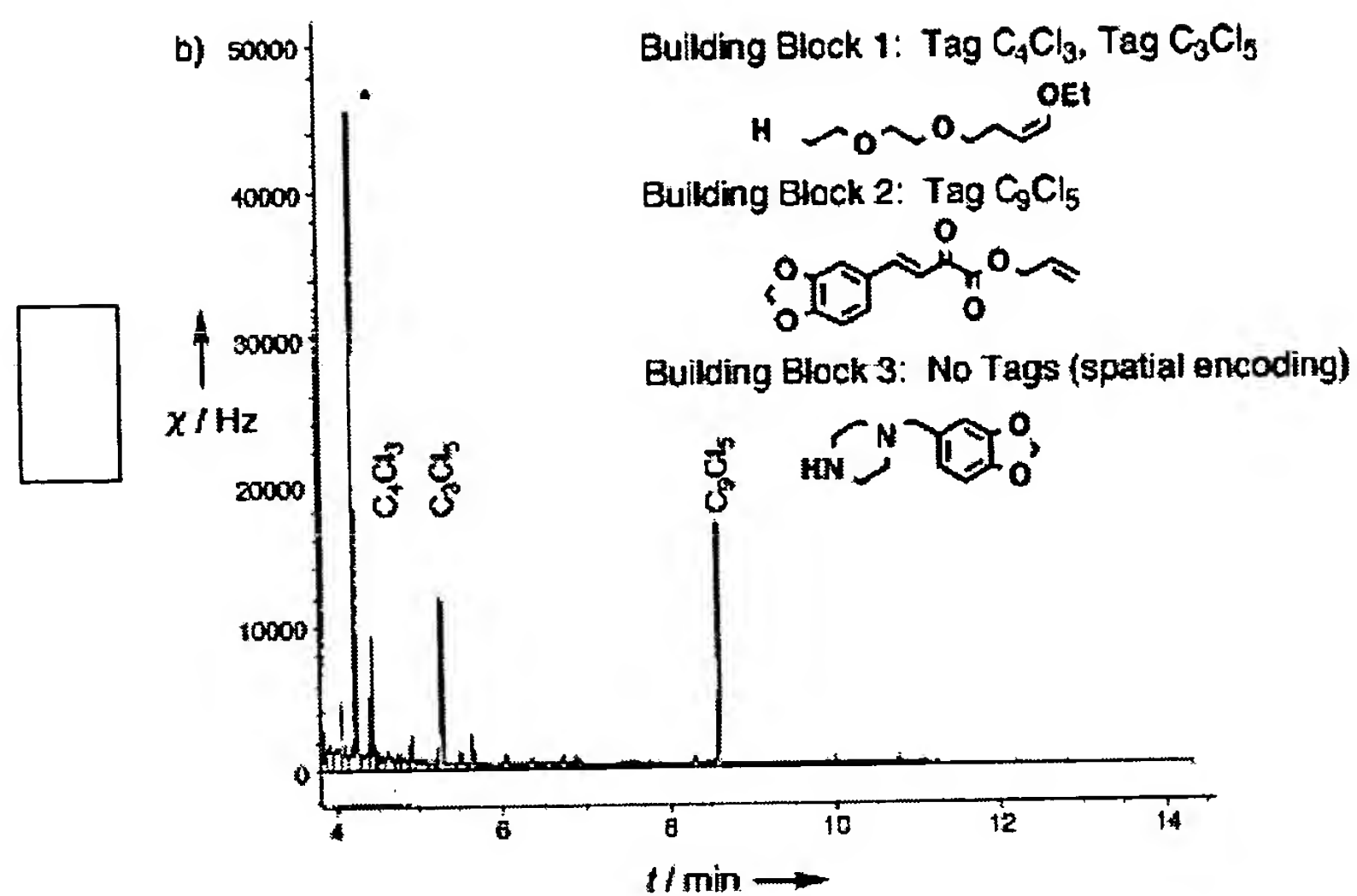
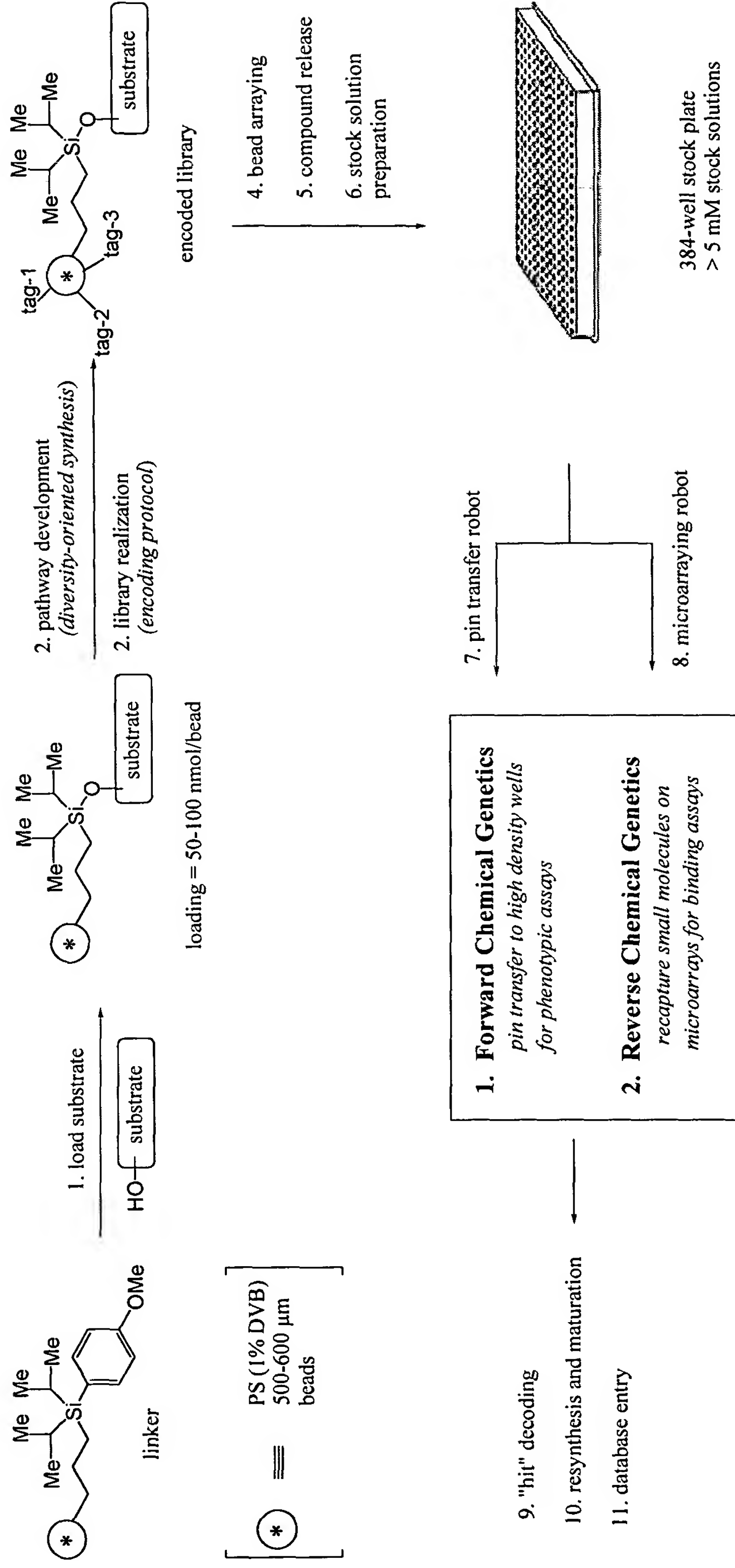


Figure 9A

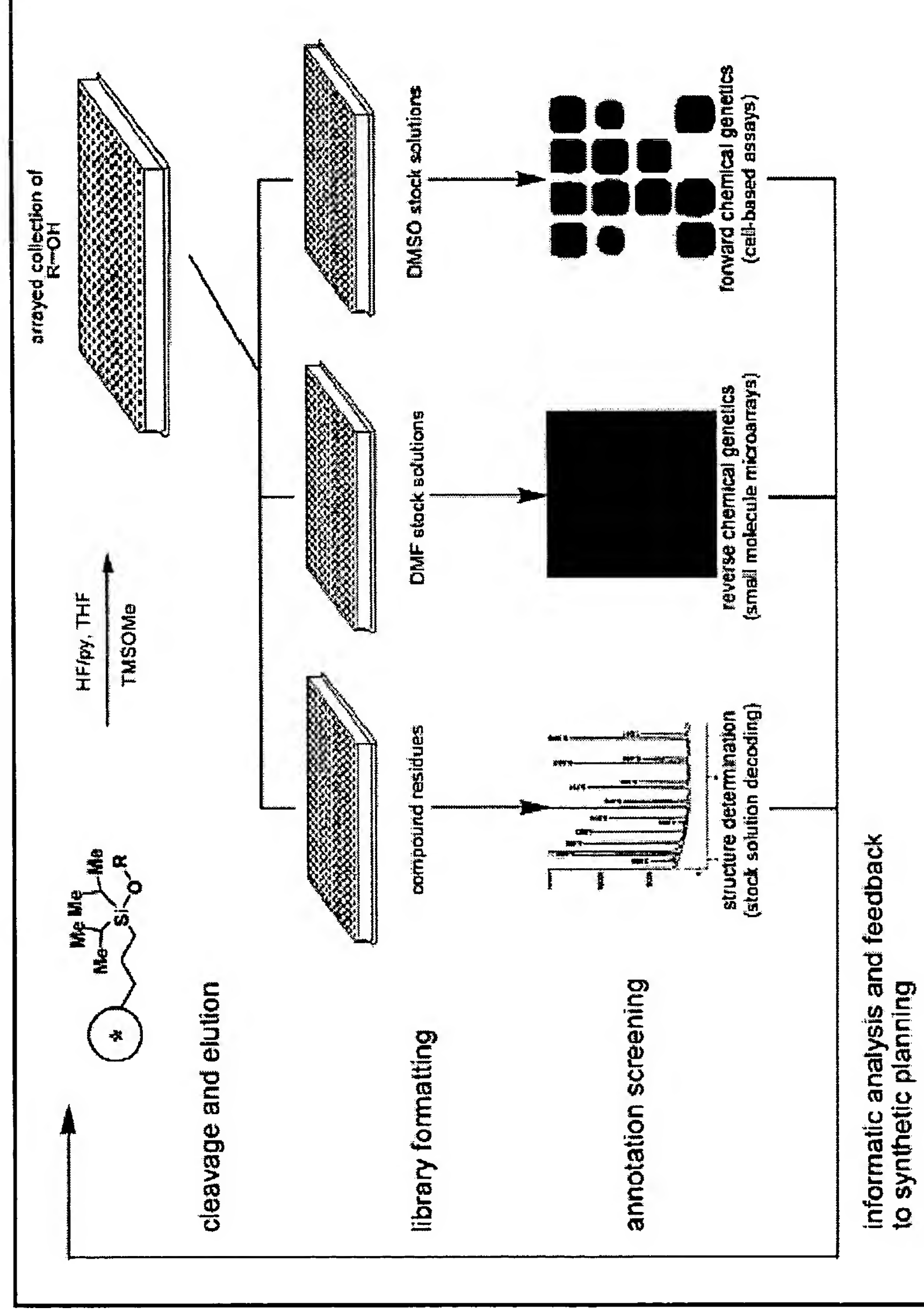


**Figure 9B**

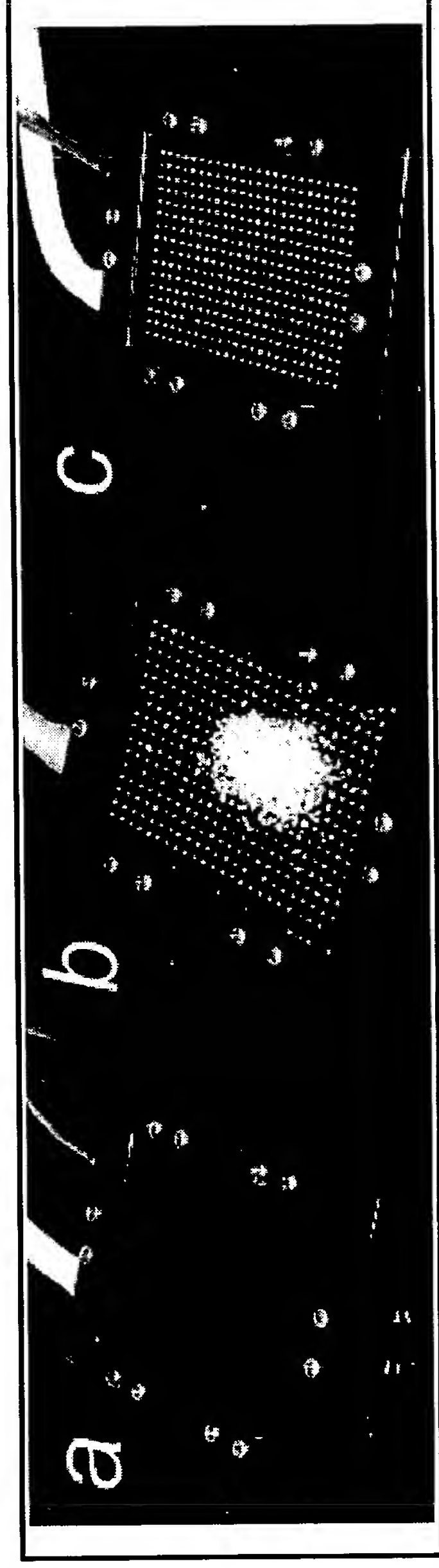




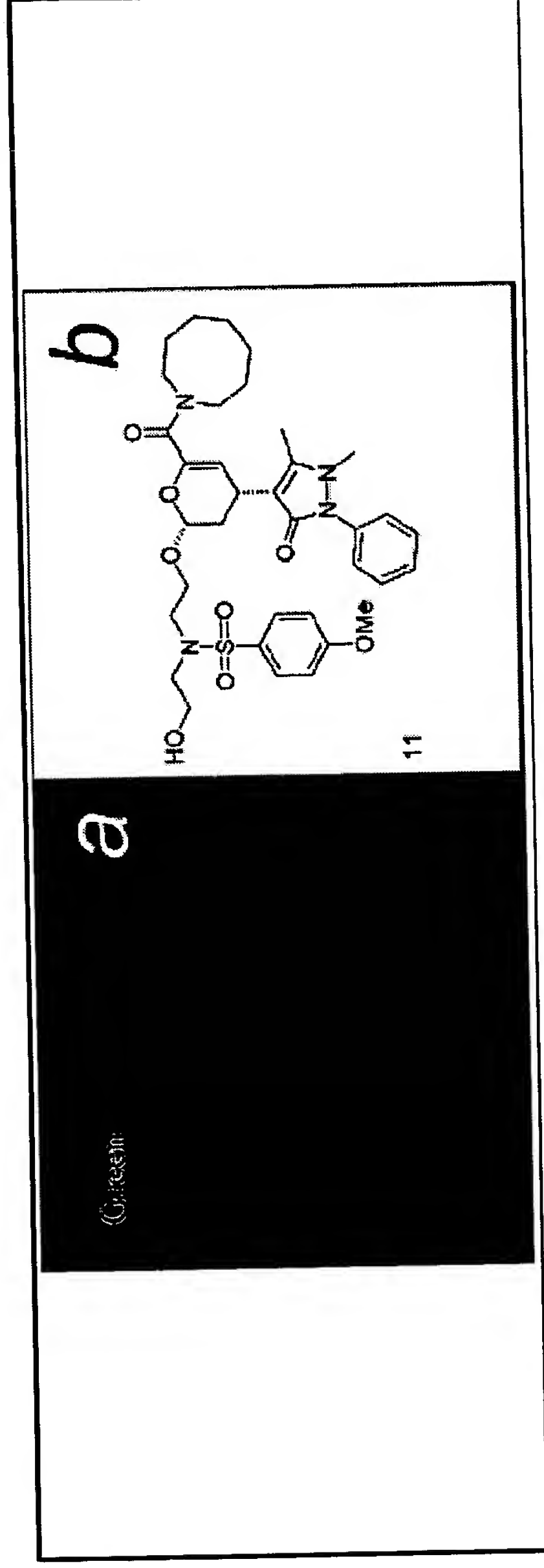
**Figure 10**



**Figure 11**



**Figure 12**



**Figure 13**

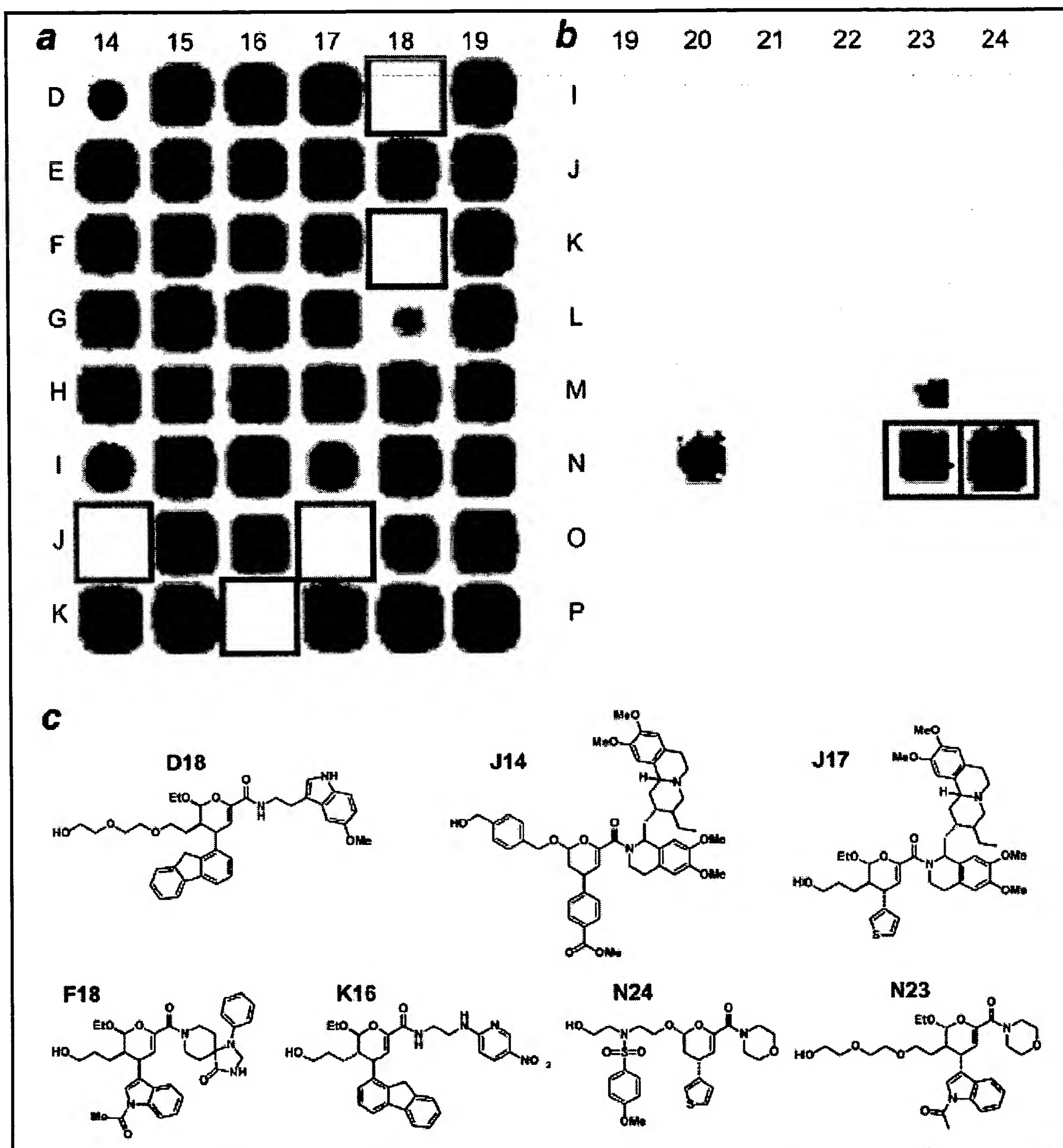
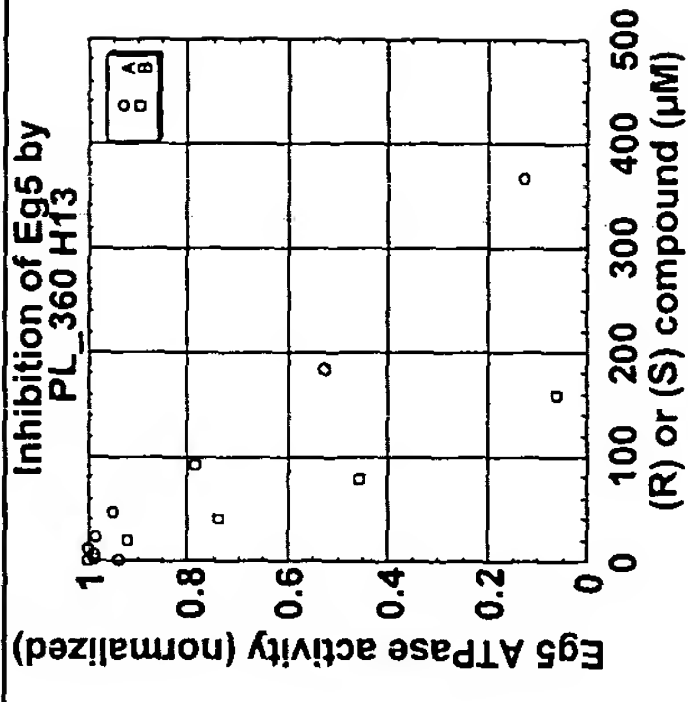
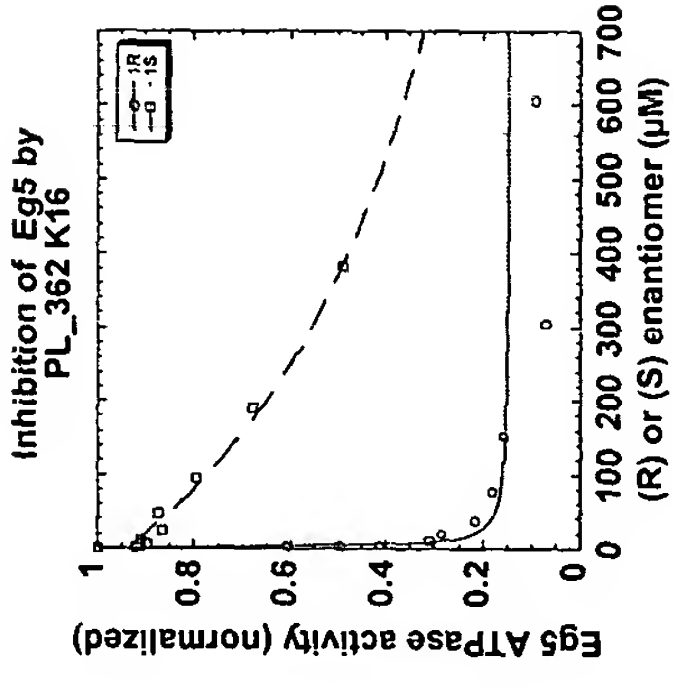


Figure 14

Inhibition of ATP hydrolysis by Eg5 in vitro	
Effect on BS-C-1 cells (R) (S)	(R) (S)
<div> <div> <chem>CCOC[C@H]1C[C@@H](C[C@H]2[C@@H](C[C@H](O)CC[C@H]2C(=O)NCCc3ccc(F)cc3)[C@H](C1)c4ccccc4</chem> </div> <div>           Stavenger PL_362 K16 -(R)- active (unpublished)         </div> </div>	<div> <div>           Induces Mono-asters 60 <math>\mu</math>M 1 mM         </div> <div> <math>K_i = 1.9 \mu</math>M <math>K_i &gt; 100 \mu</math>M         </div> </div>
<div> <div> <chem>CCOC[C@H]1C[C@@H](C[C@H]2[C@@H](C[C@H](O)CC[C@H]2C(=O)NCCc3ccccc3)[C@H](C1)c4ccc(cc4)C(=O)OC</chem> </div> <div>           Stavenger PL_360 H13 (unpublished)         </div> </div>	<div> <div>           Induces MT phenotype (NOT mono-asters)   <b>Not Eg5 inhibitor</b>             No effect 100 <math>\mu</math>M         </div> <div> <math>K_i = 200 \mu</math>M <math>K_i = 80 \mu</math>M         </div> </div>



**Figure 15**

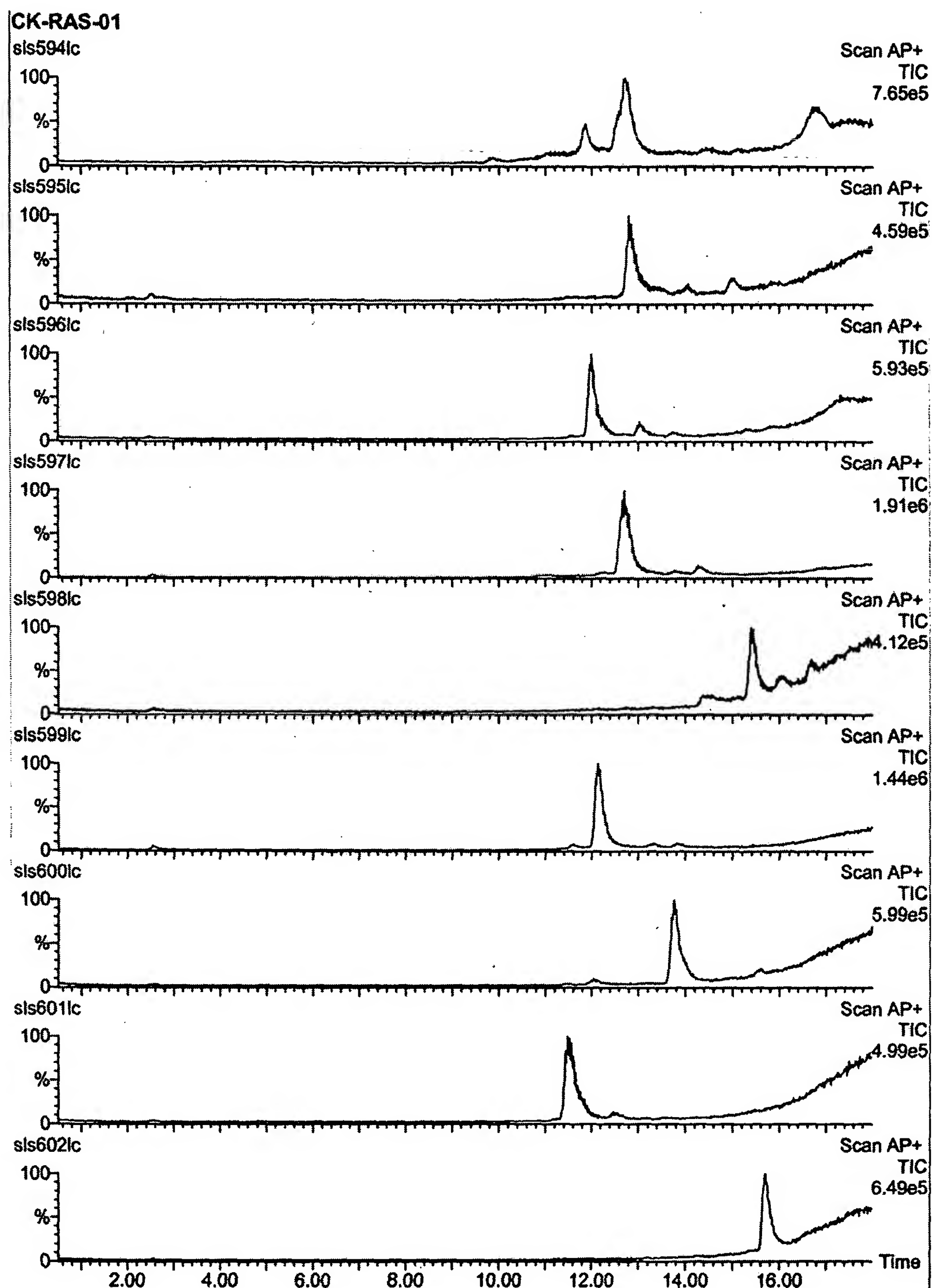
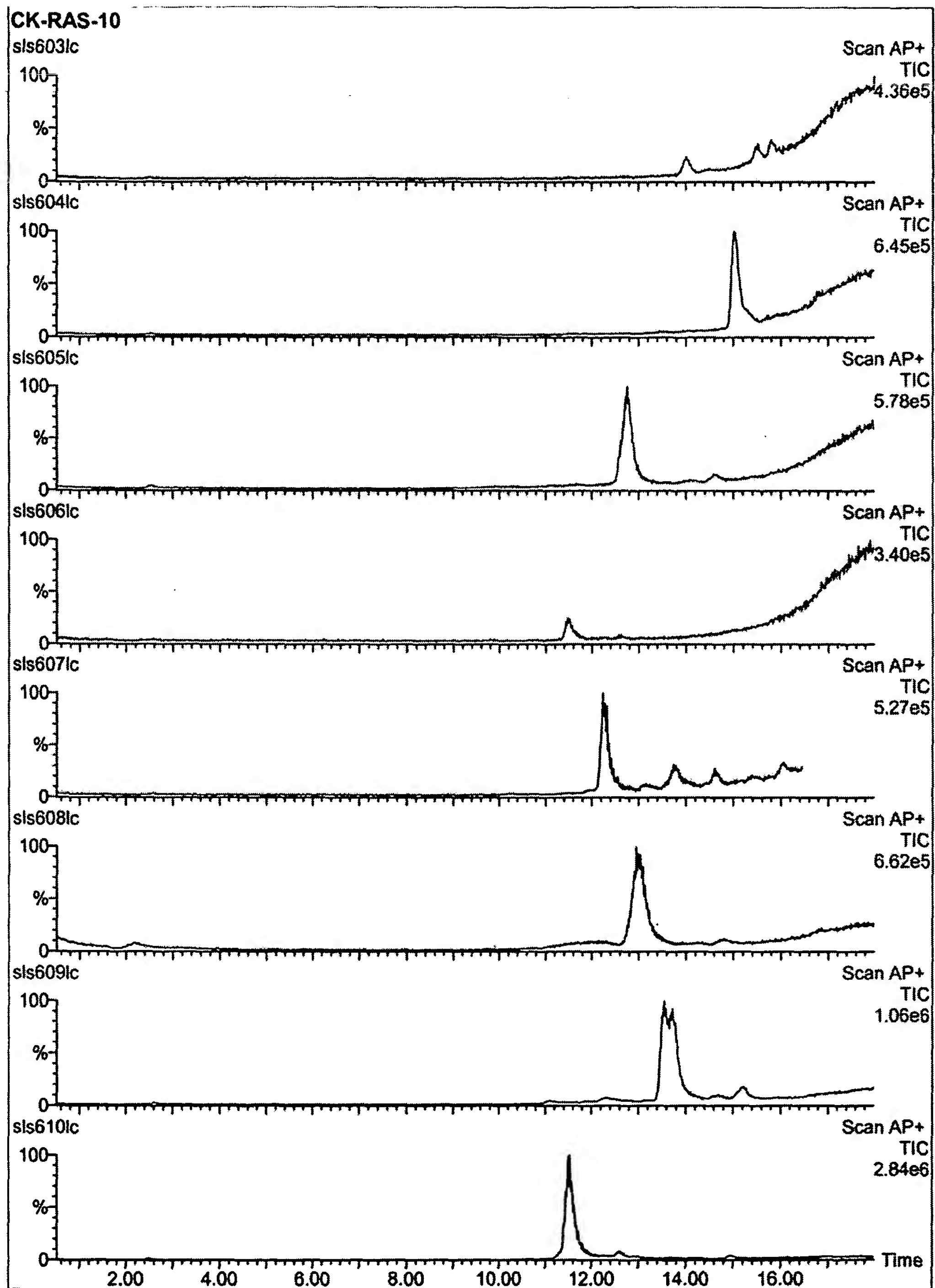
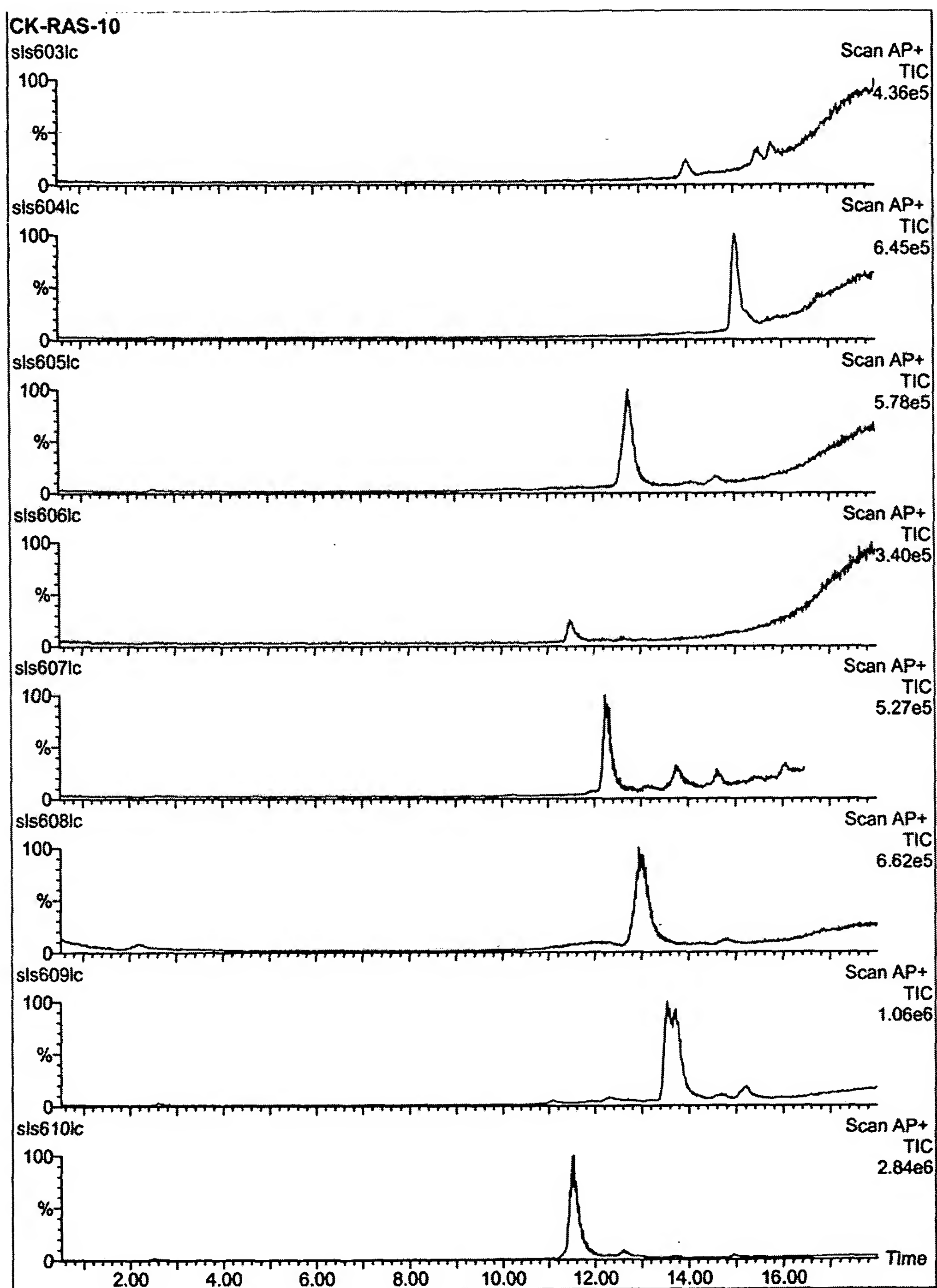


Figure 16A

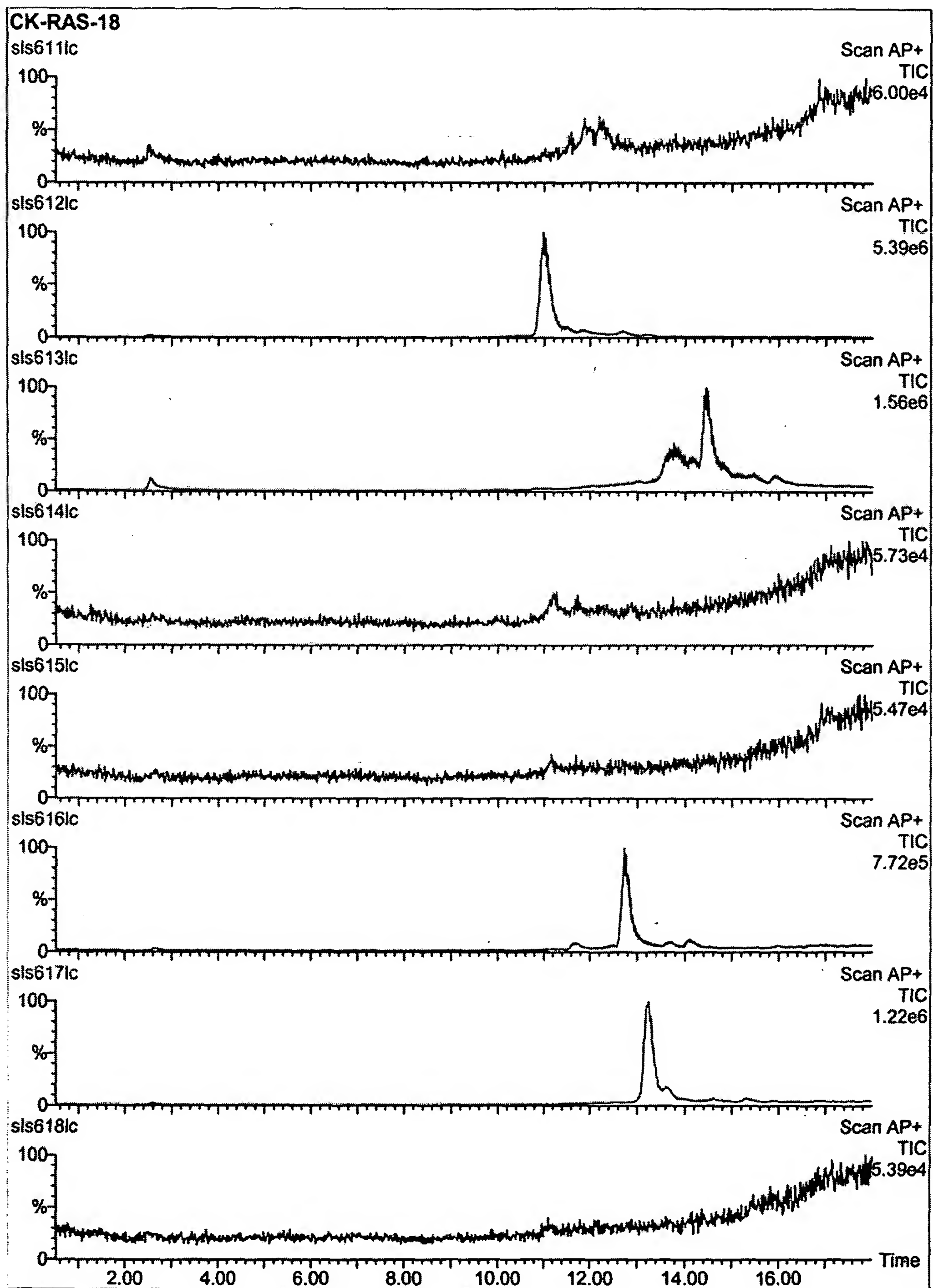




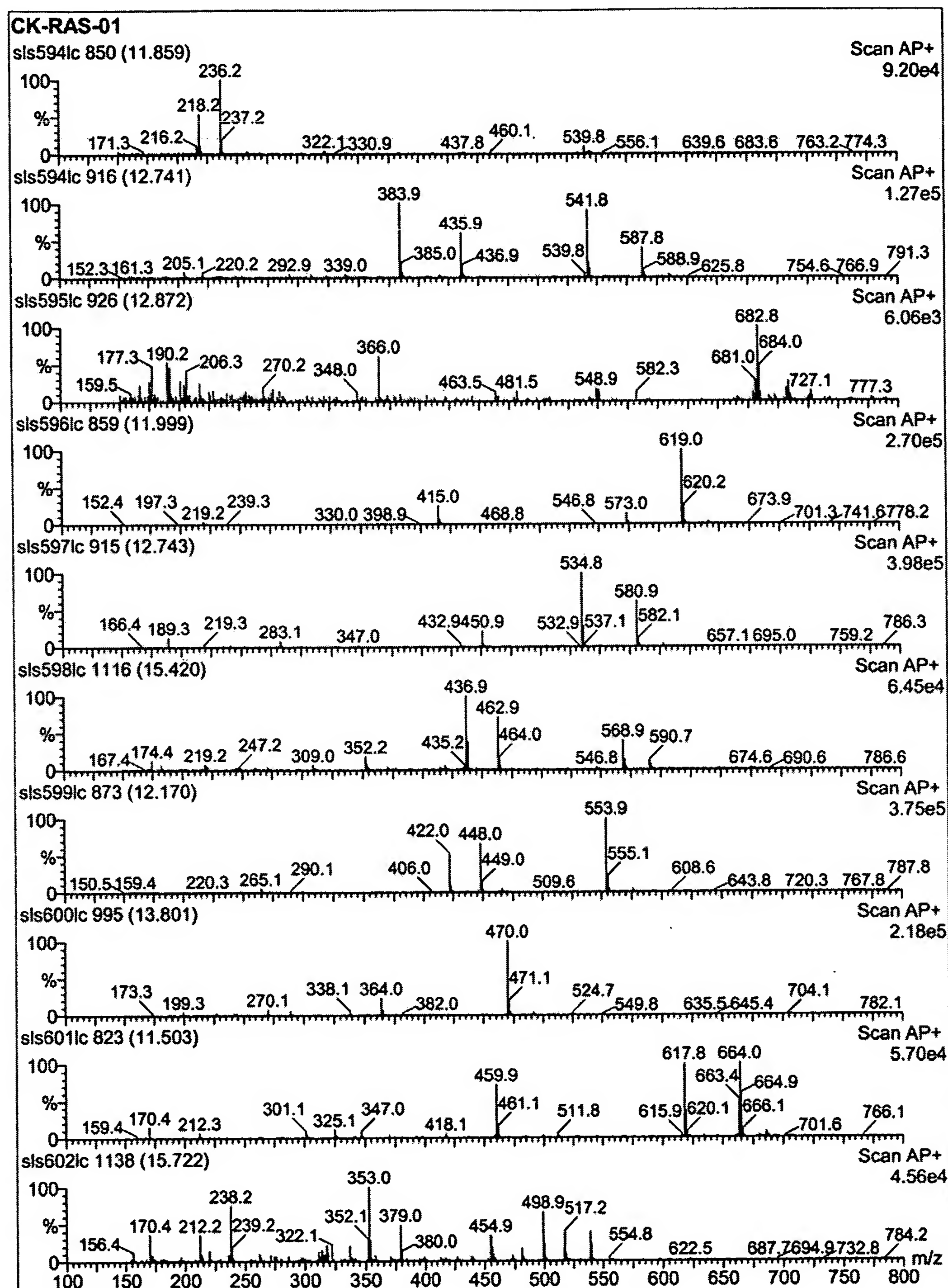
**Figure 16B**



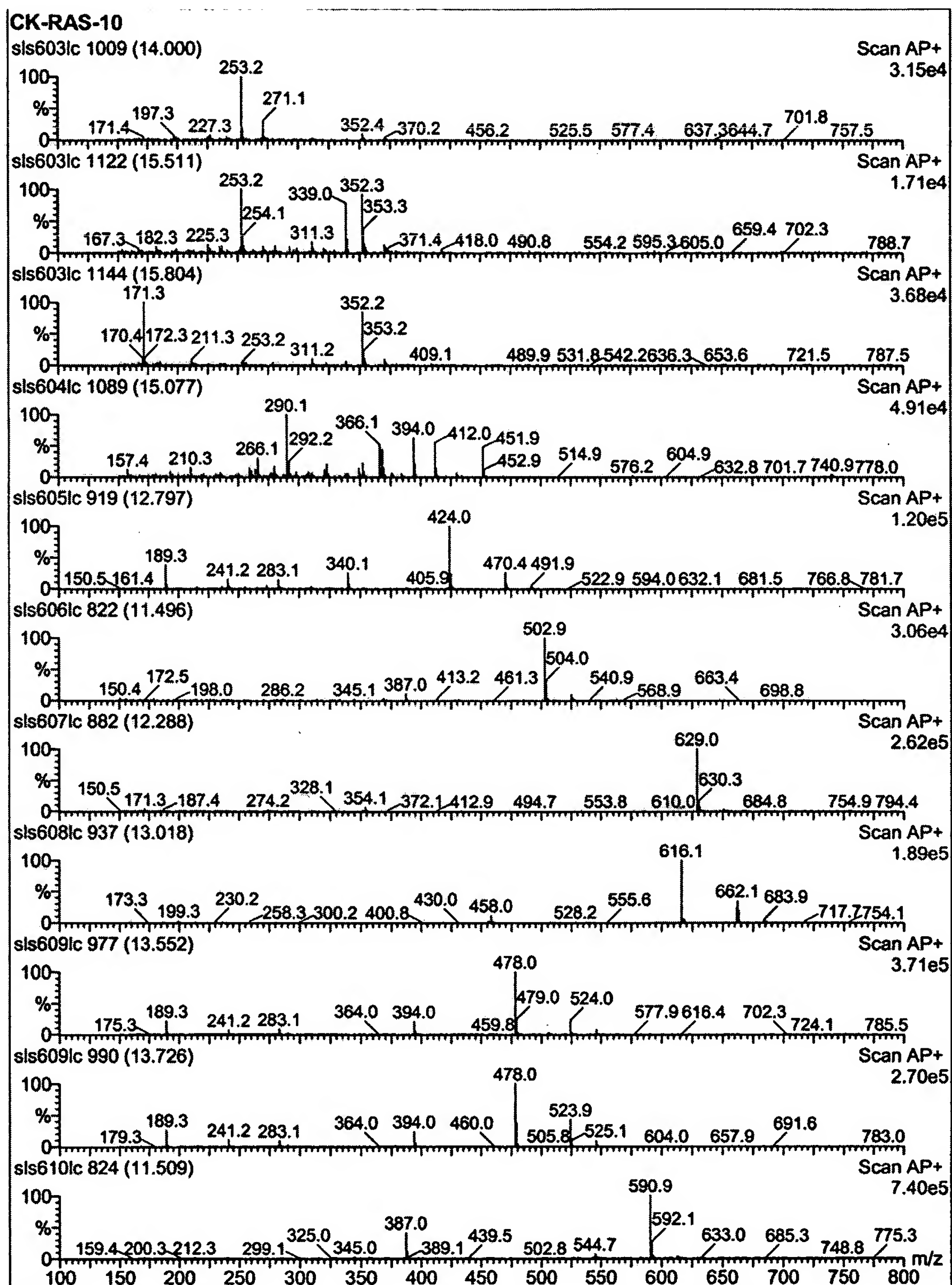
**Figure 16C**



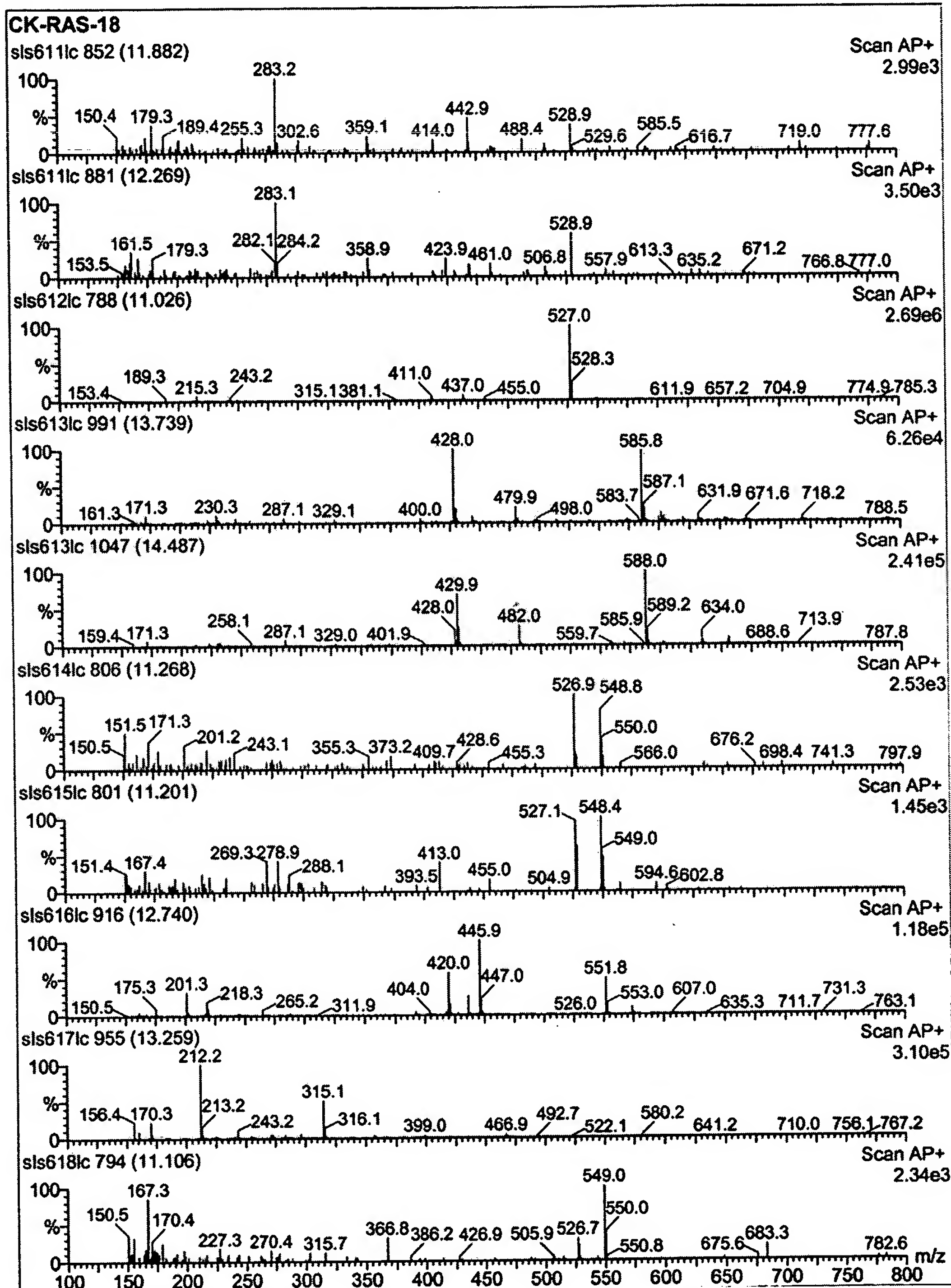
**Figure 16D**



**Figure 17A**

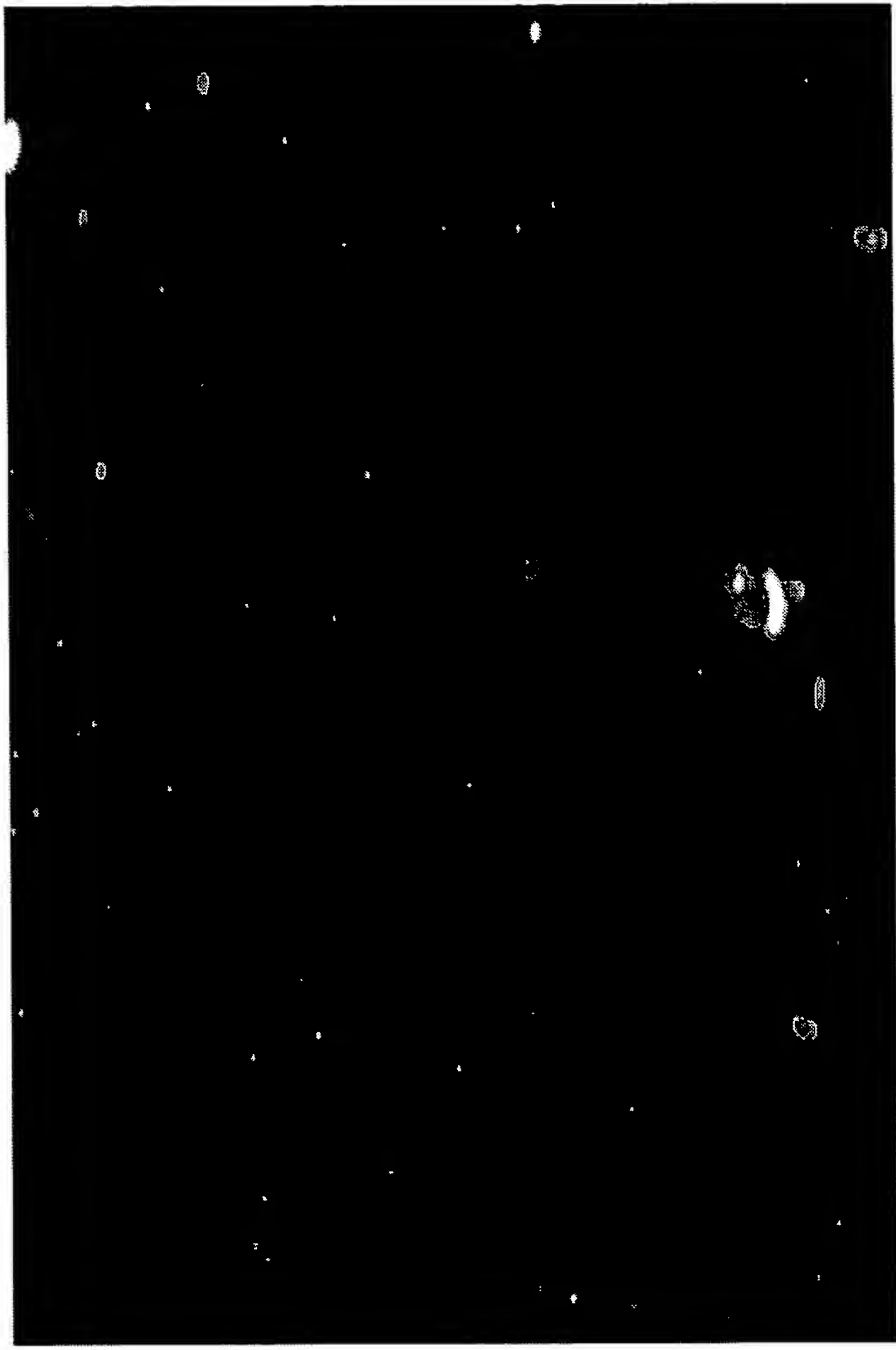


**Figure 17B**



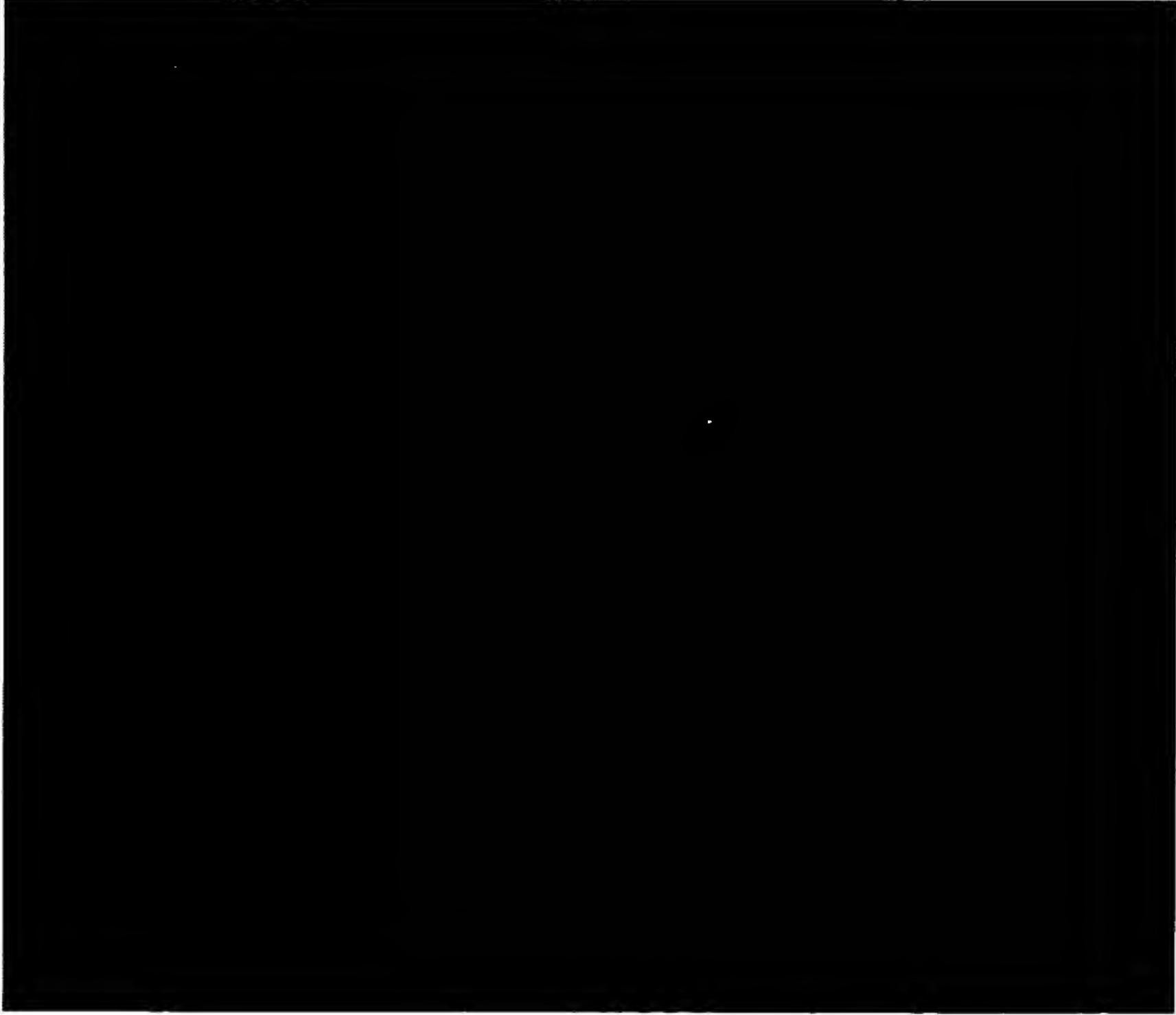
**Figure 17C**



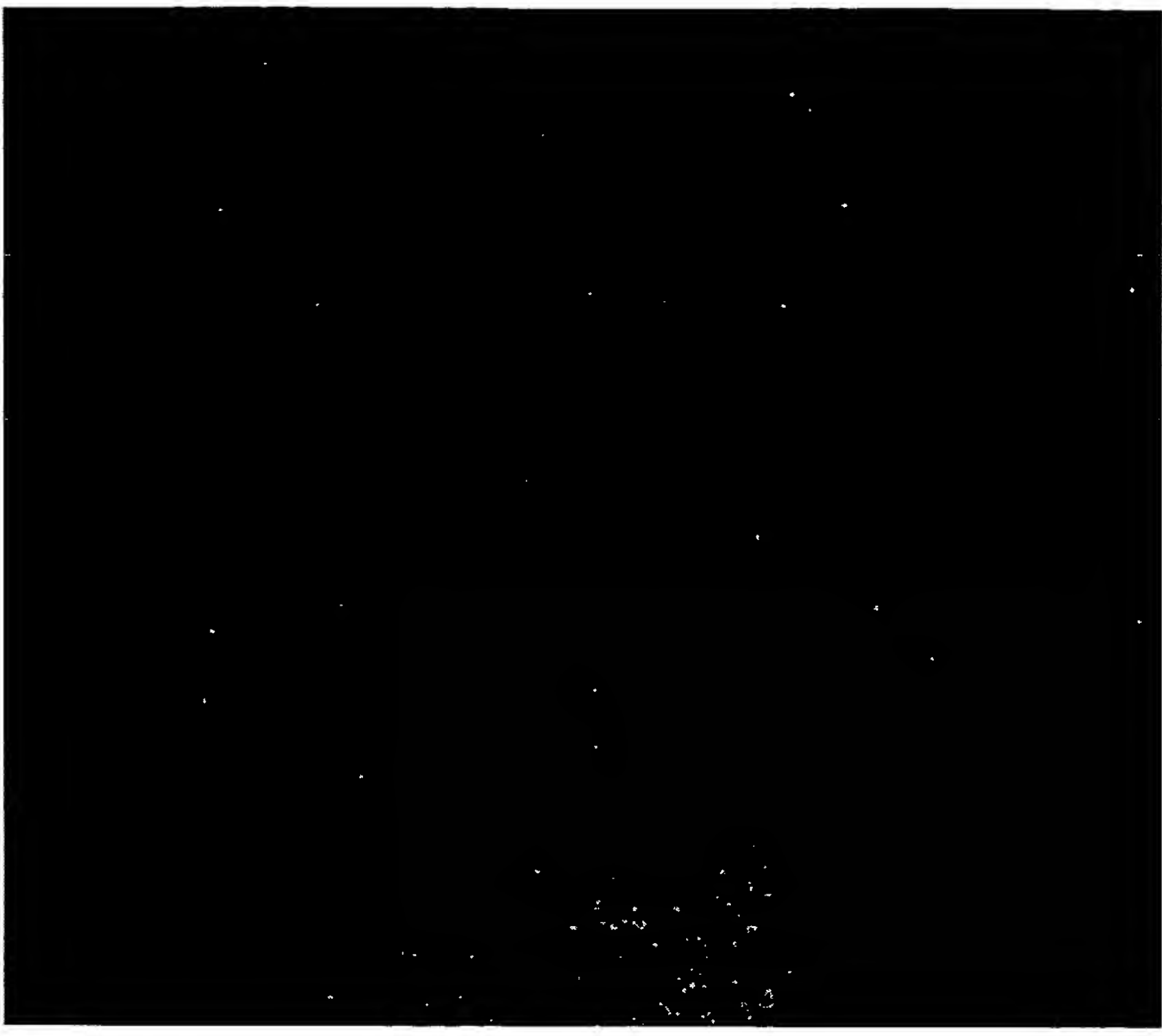


**Figure 18A**





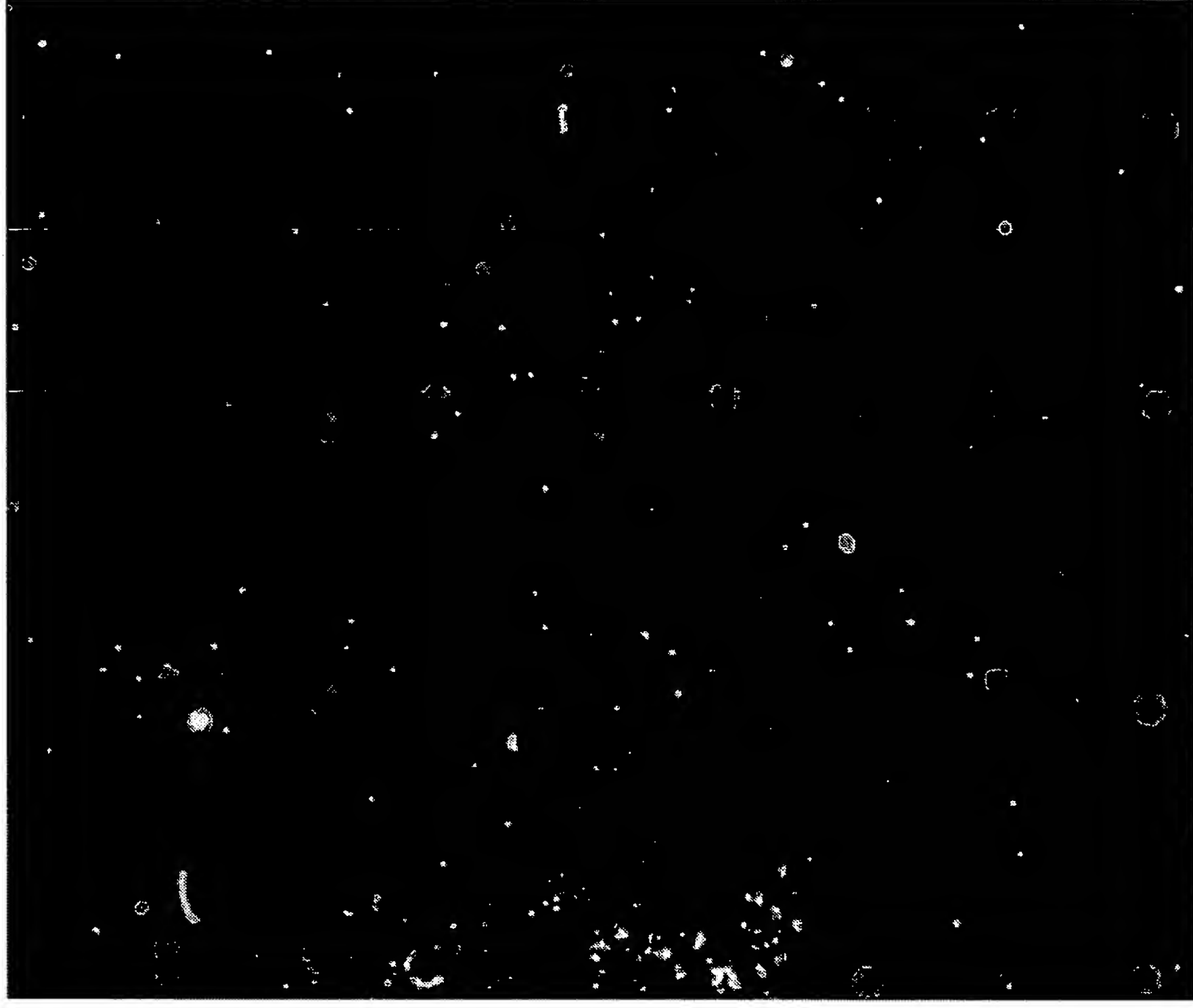
**Figure 18B**



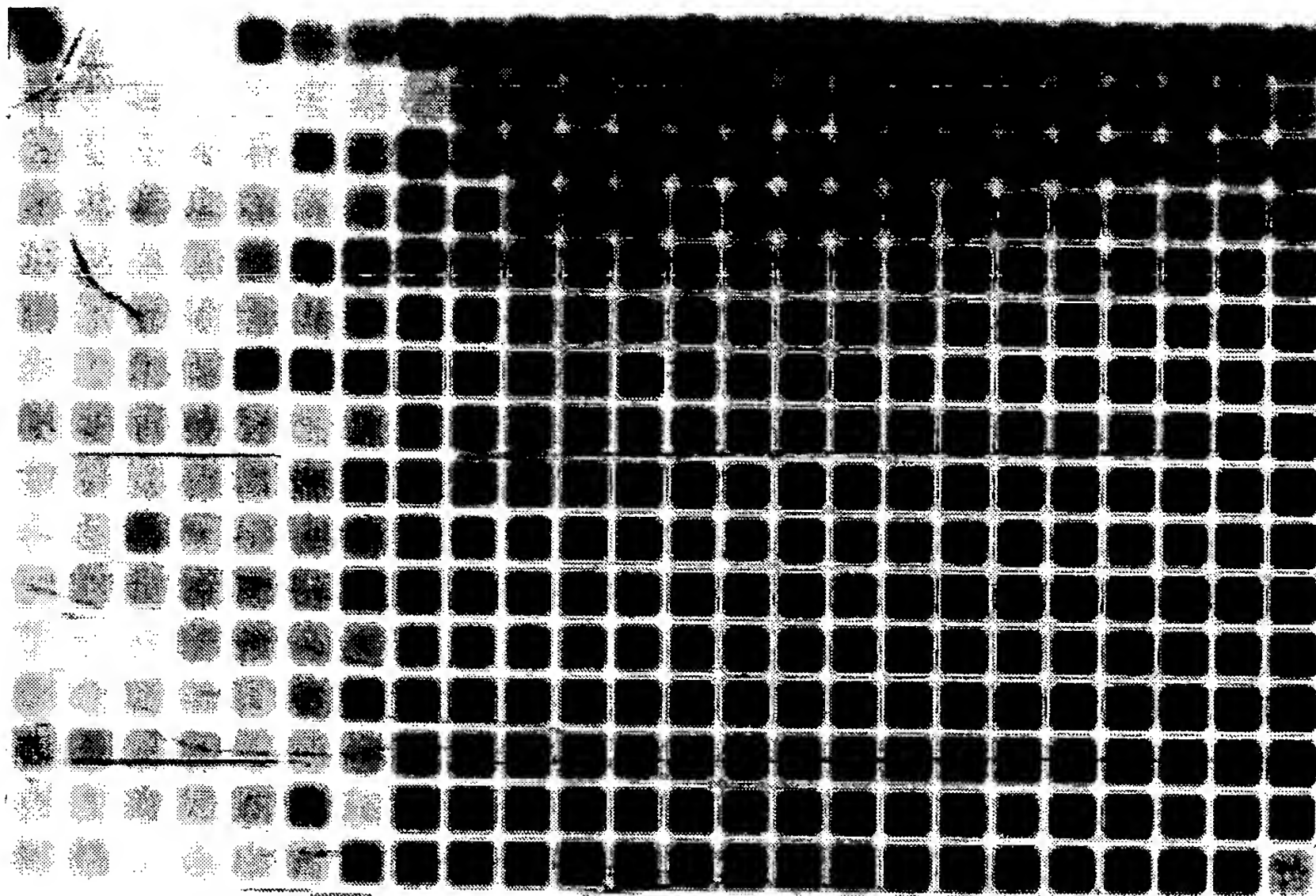
**Figure 18C**



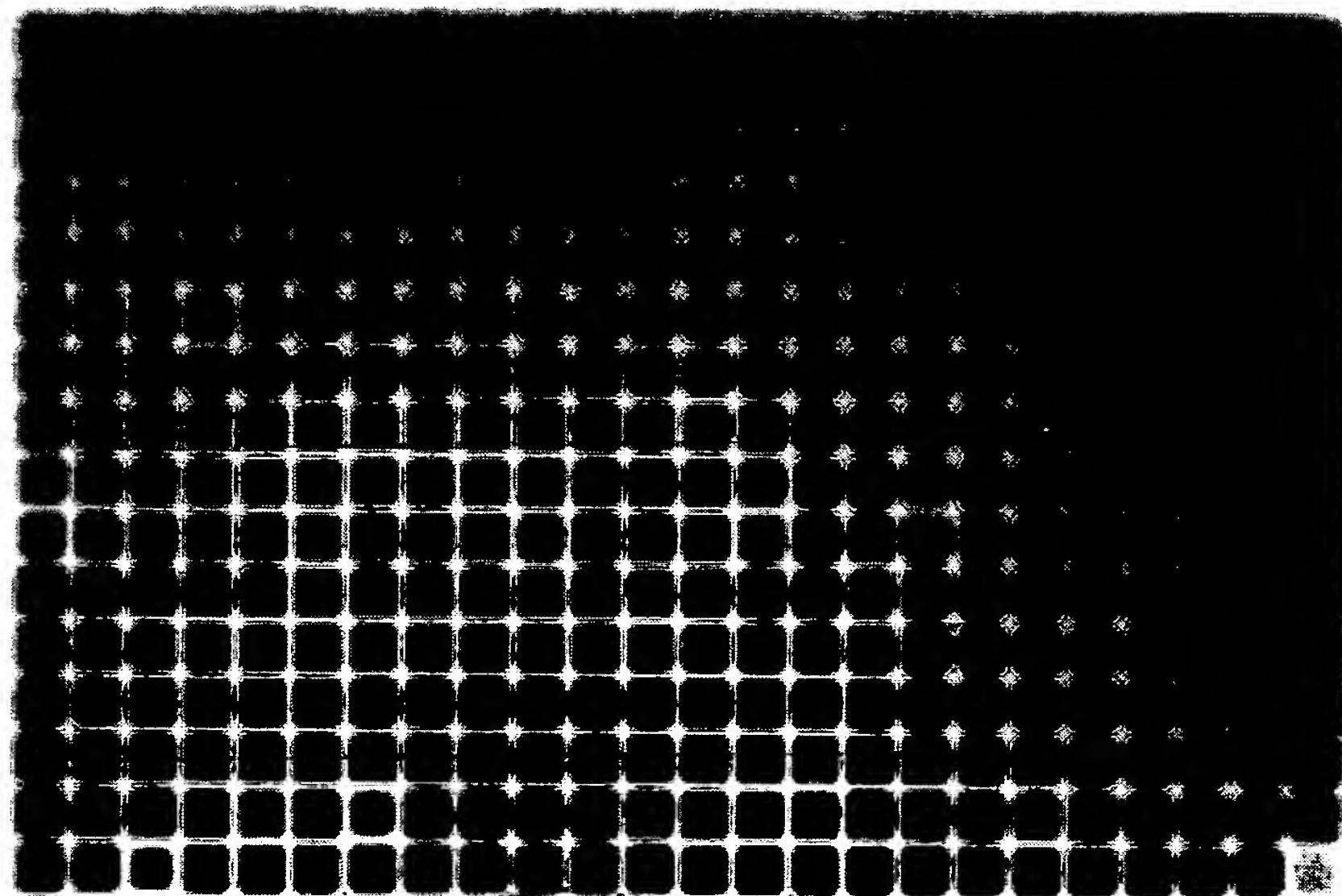
**Figure 18D**



**Figure 18E**



**Figure 19A**



**Figure 19B**

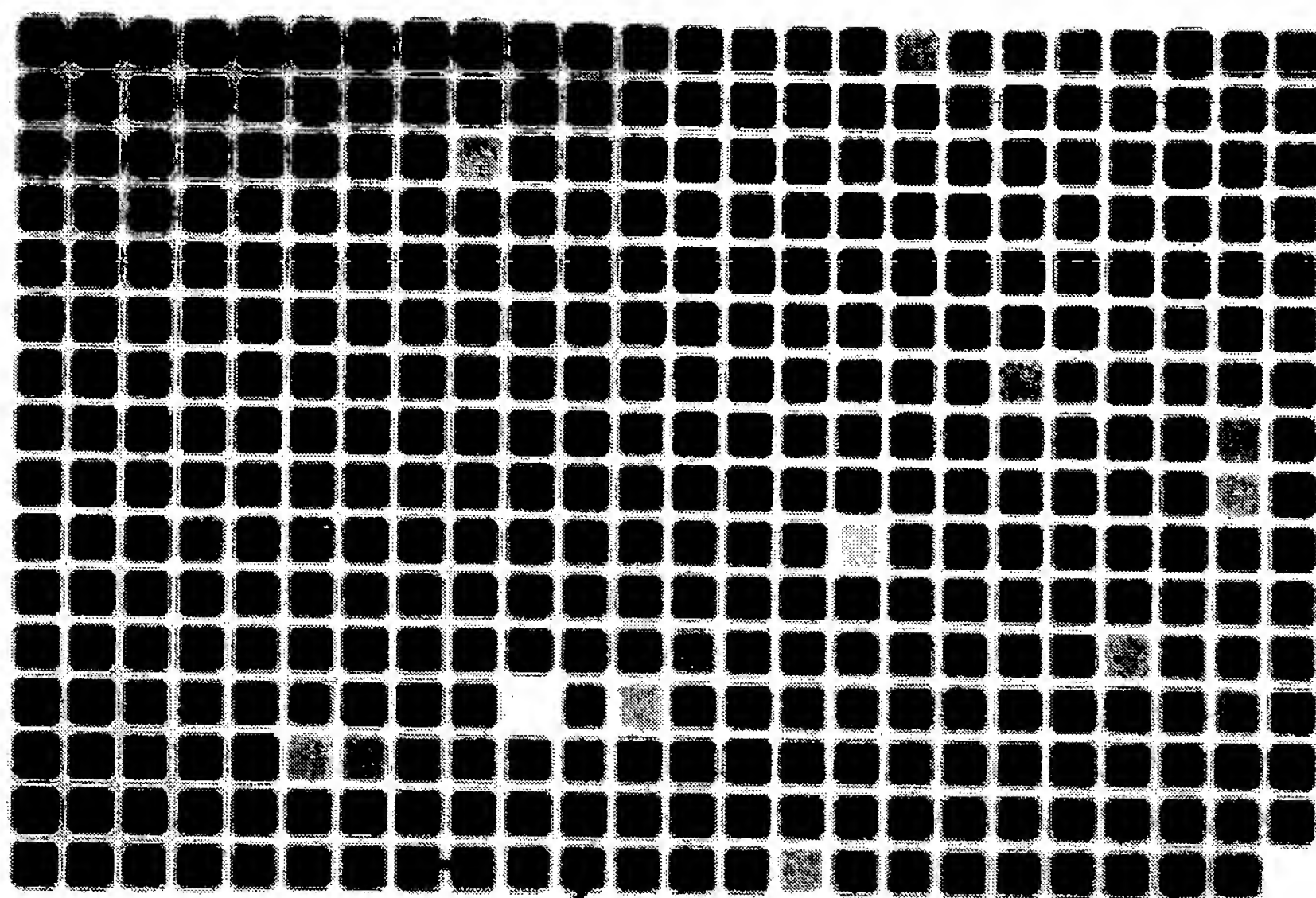


Figure 19C

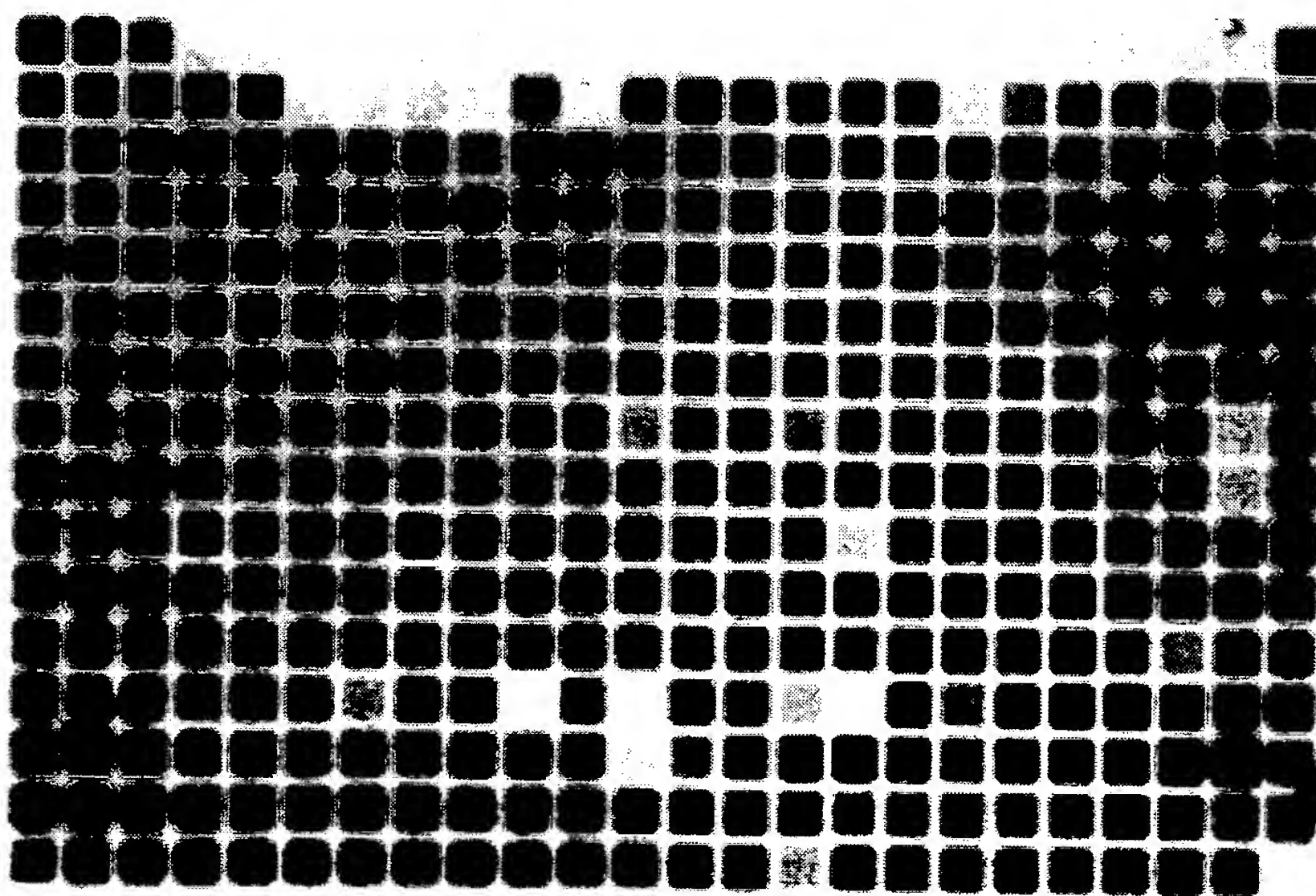


Figure 19D



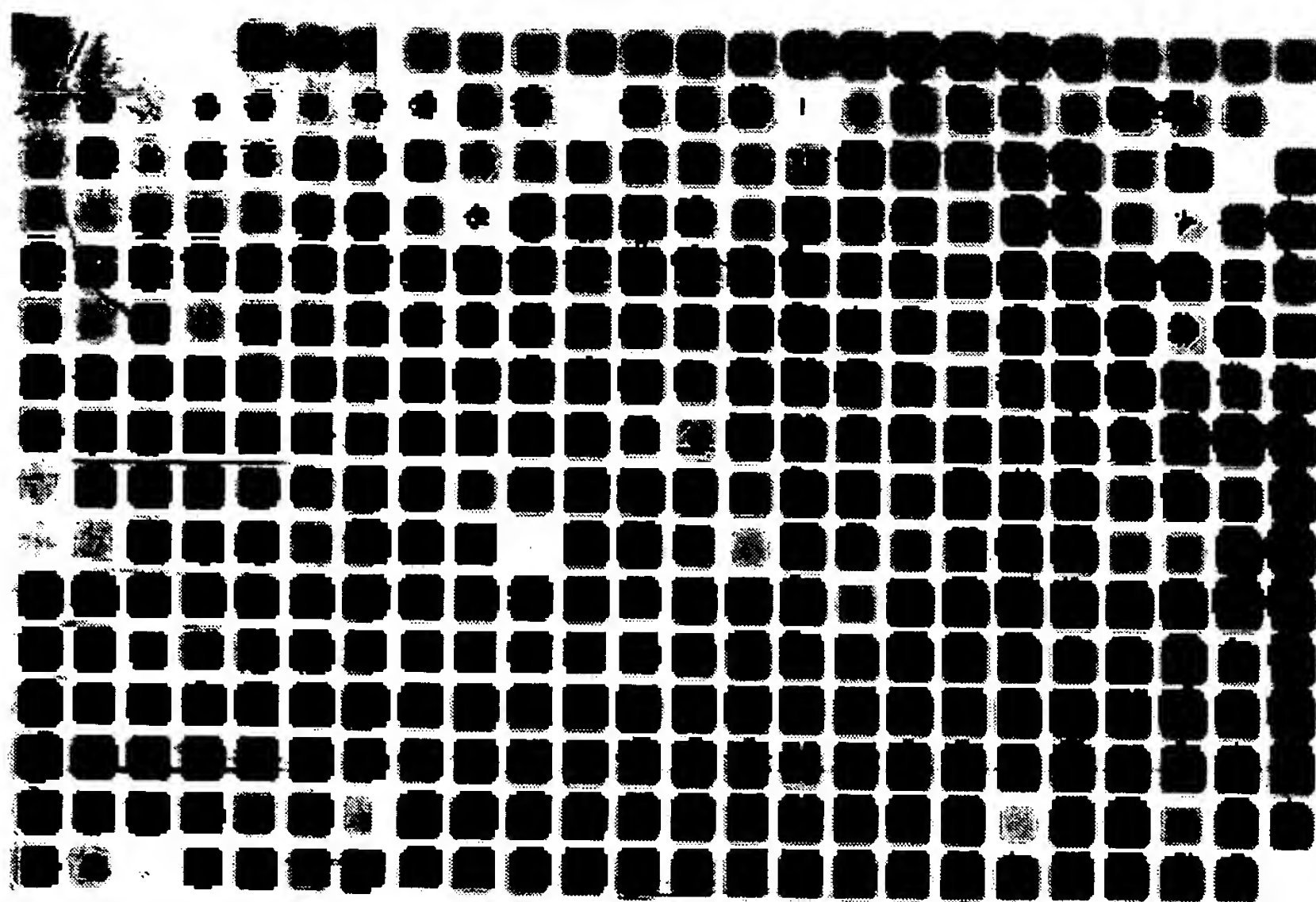


Figure 19E

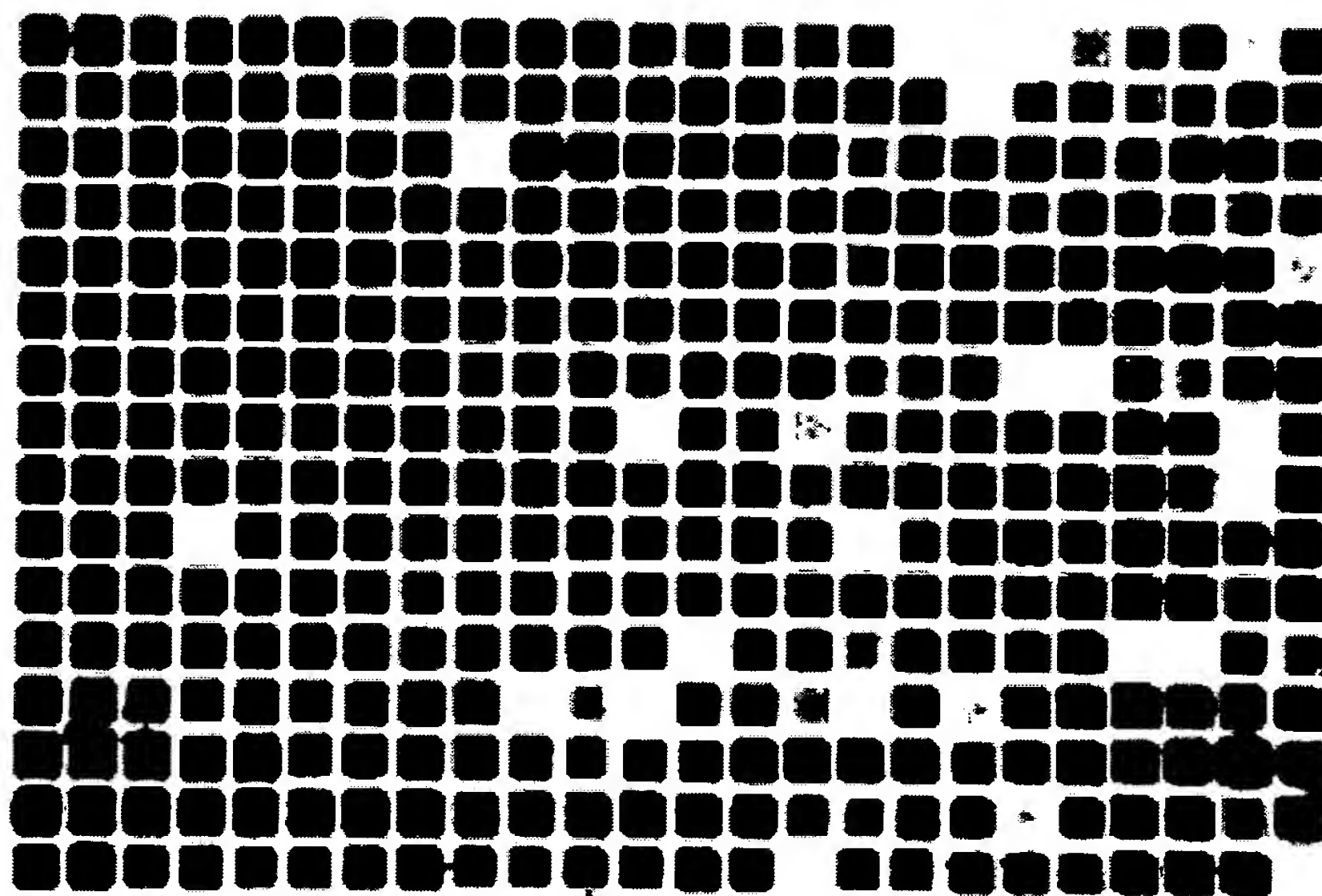
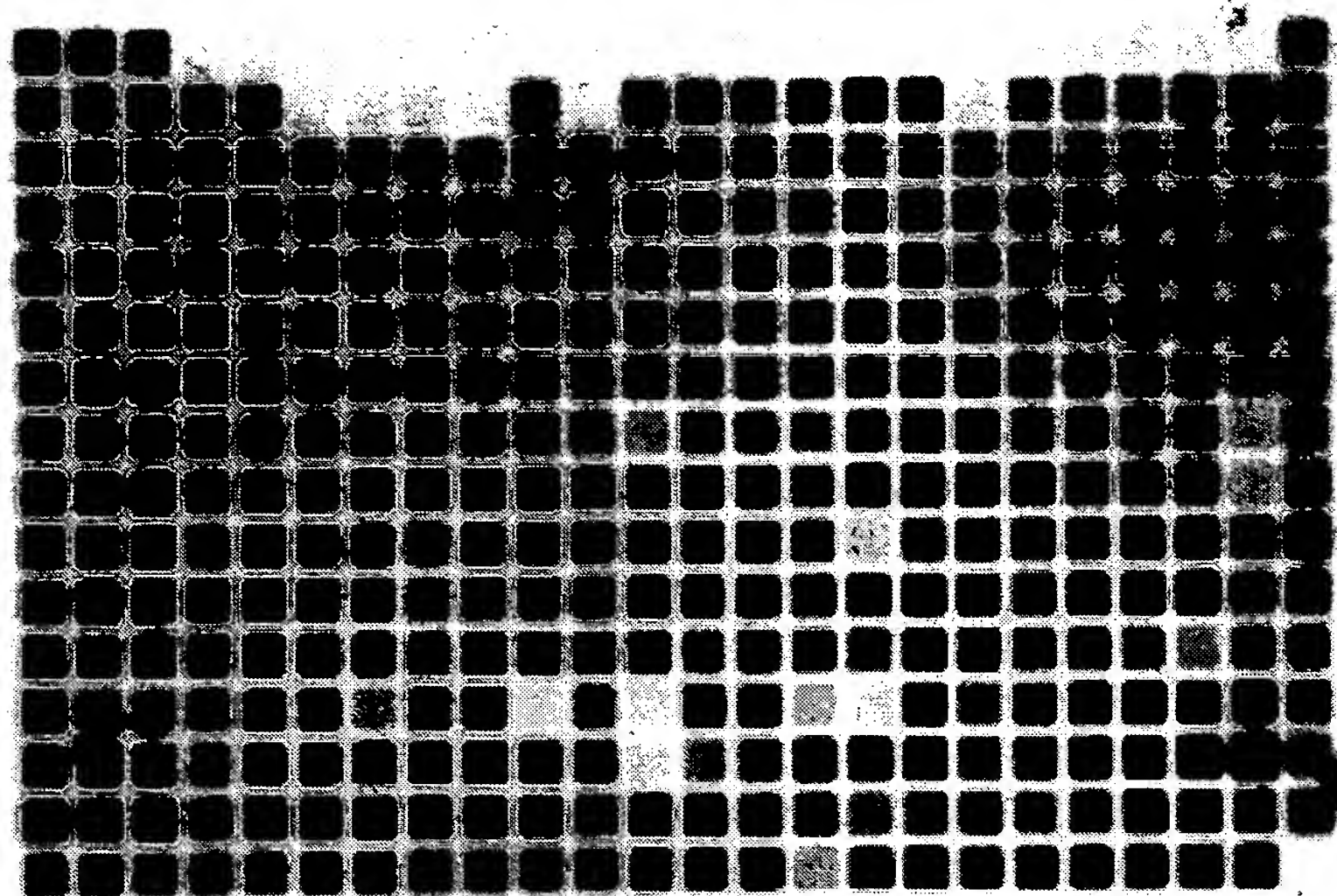
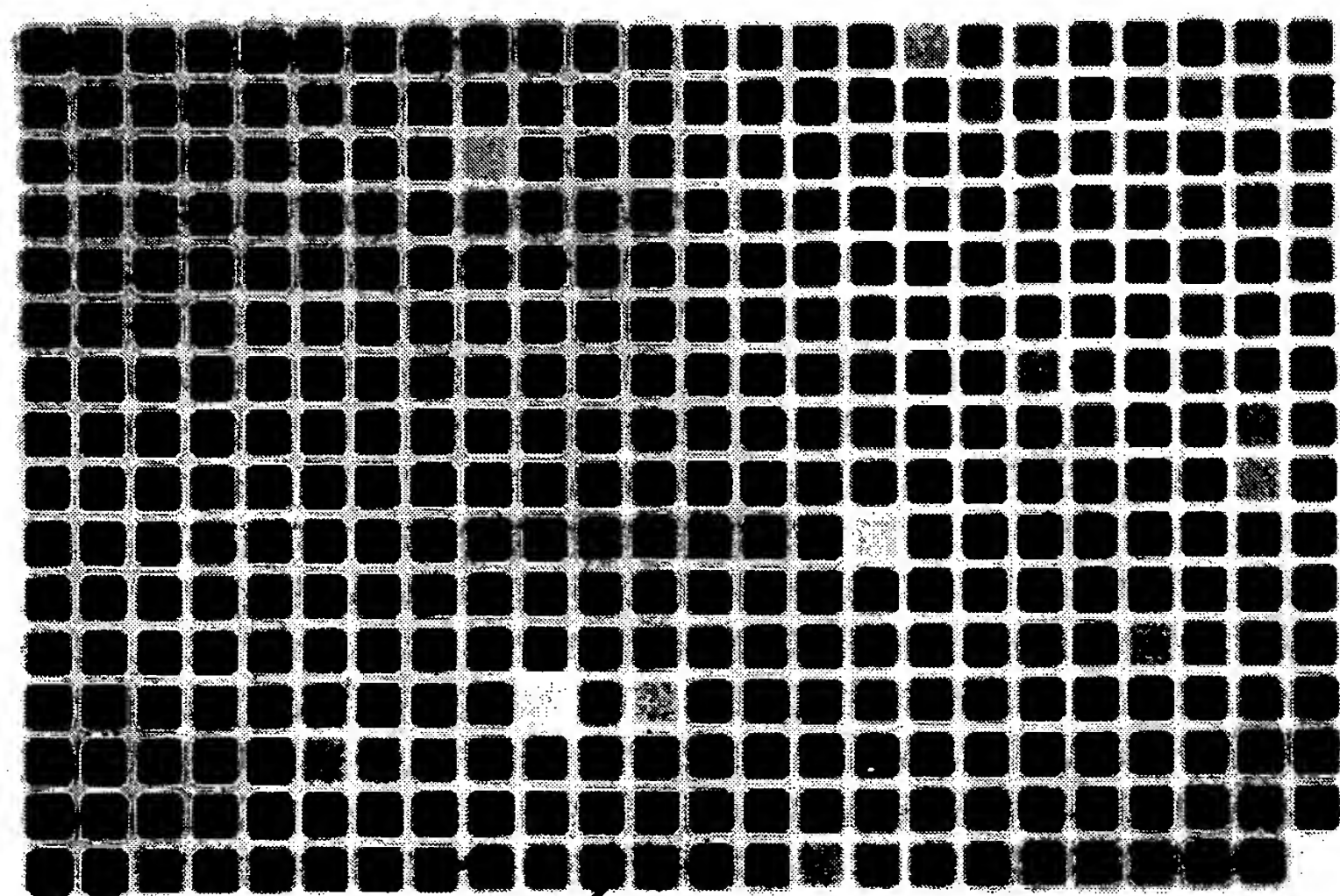


Figure 19F



**Figure 20A**

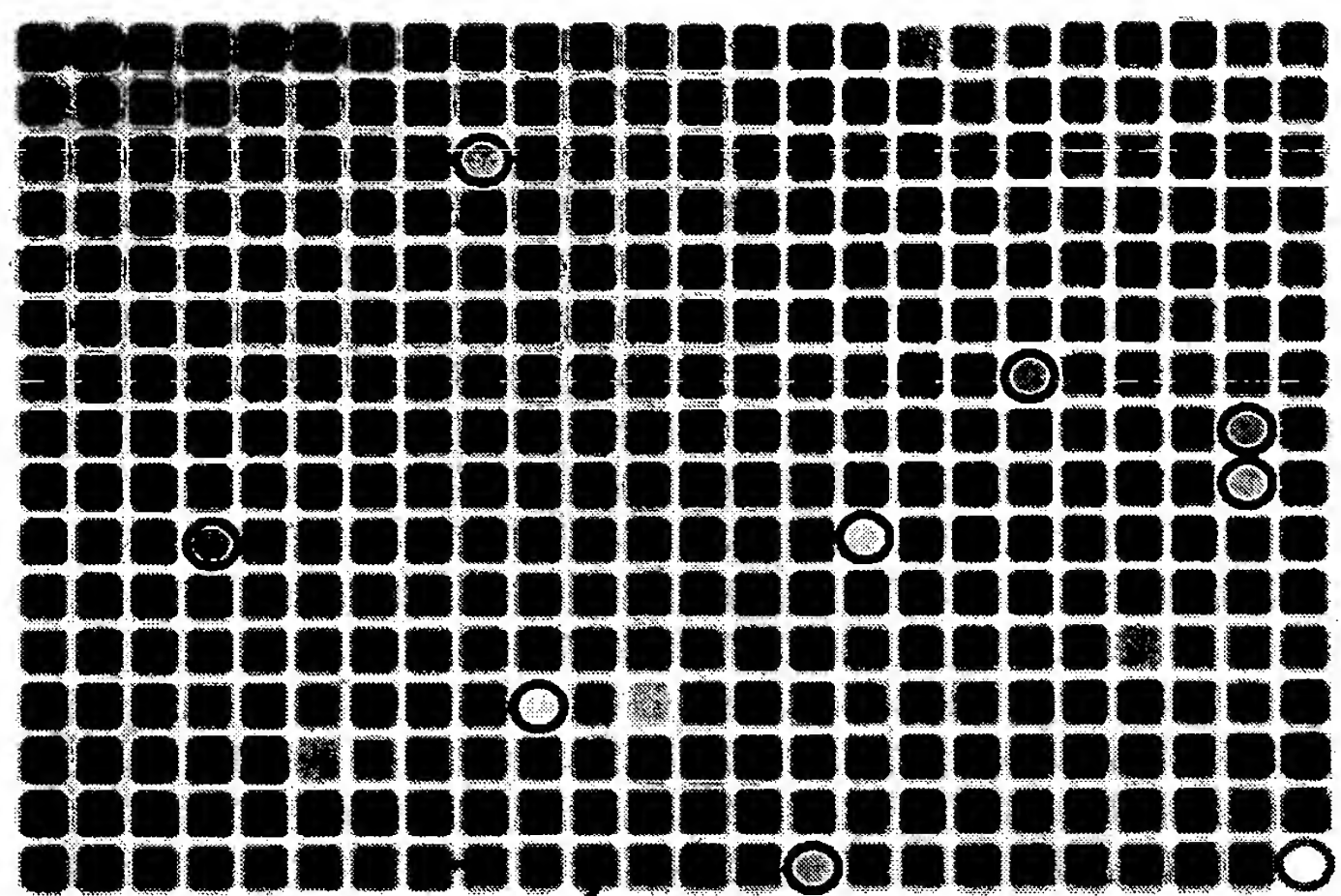


**Figure 20B**

10%FBS

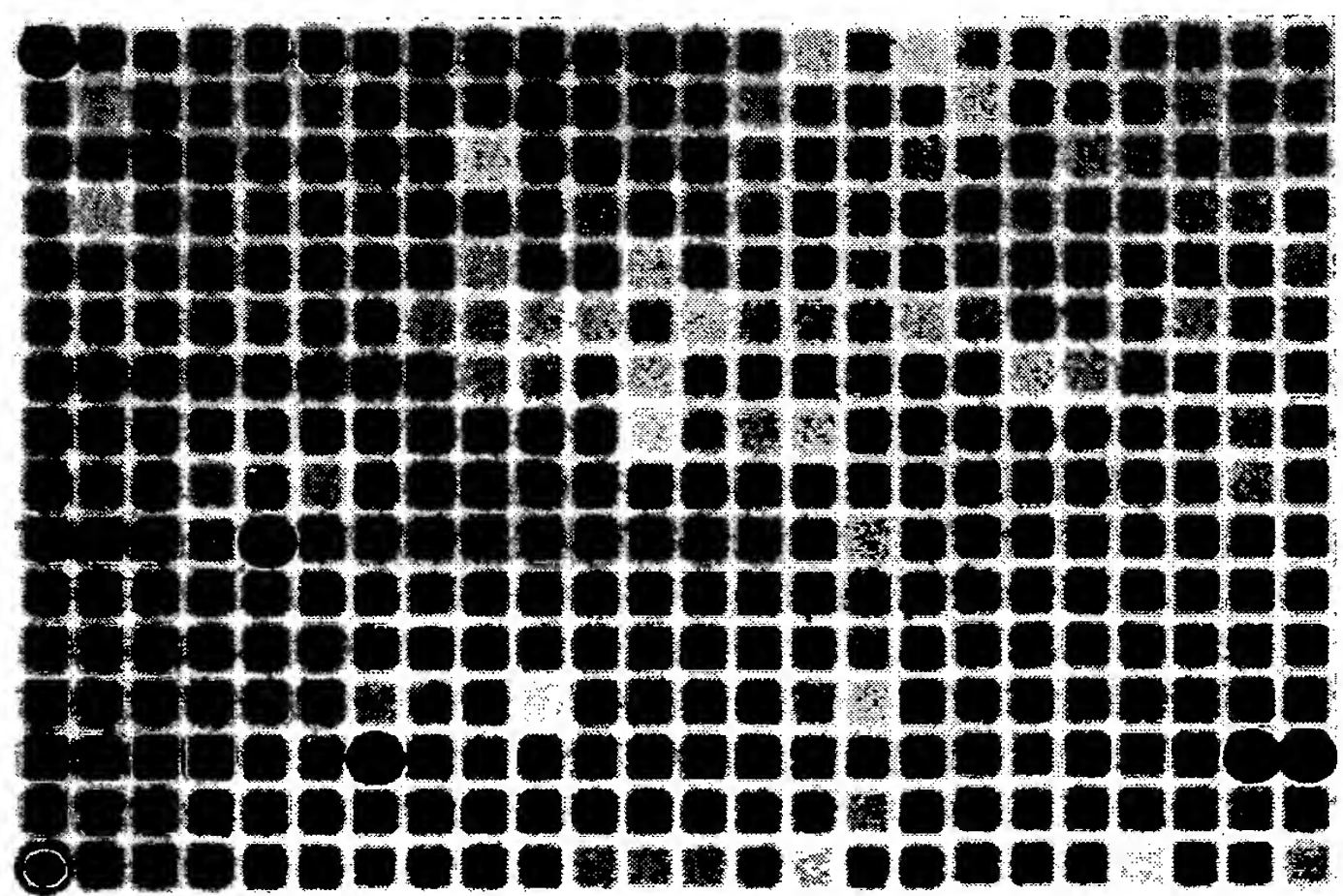
200mM  
genestein

Screen of RAS-384 for  
Inhibitors of BrdU Incorporation  
5 pinnings/cmpd (250-500nL; 25-50uM)  
16-hr incubation with 1%FBS  
Probed with 1:1000  $\alpha$ BrdU  
5-min exposure



*Inhibition of BrdU  
Incorporation*

**Figure 21A**



*Suppression of Genistein  
Antiproliferative Effects*

**Figure 21B**



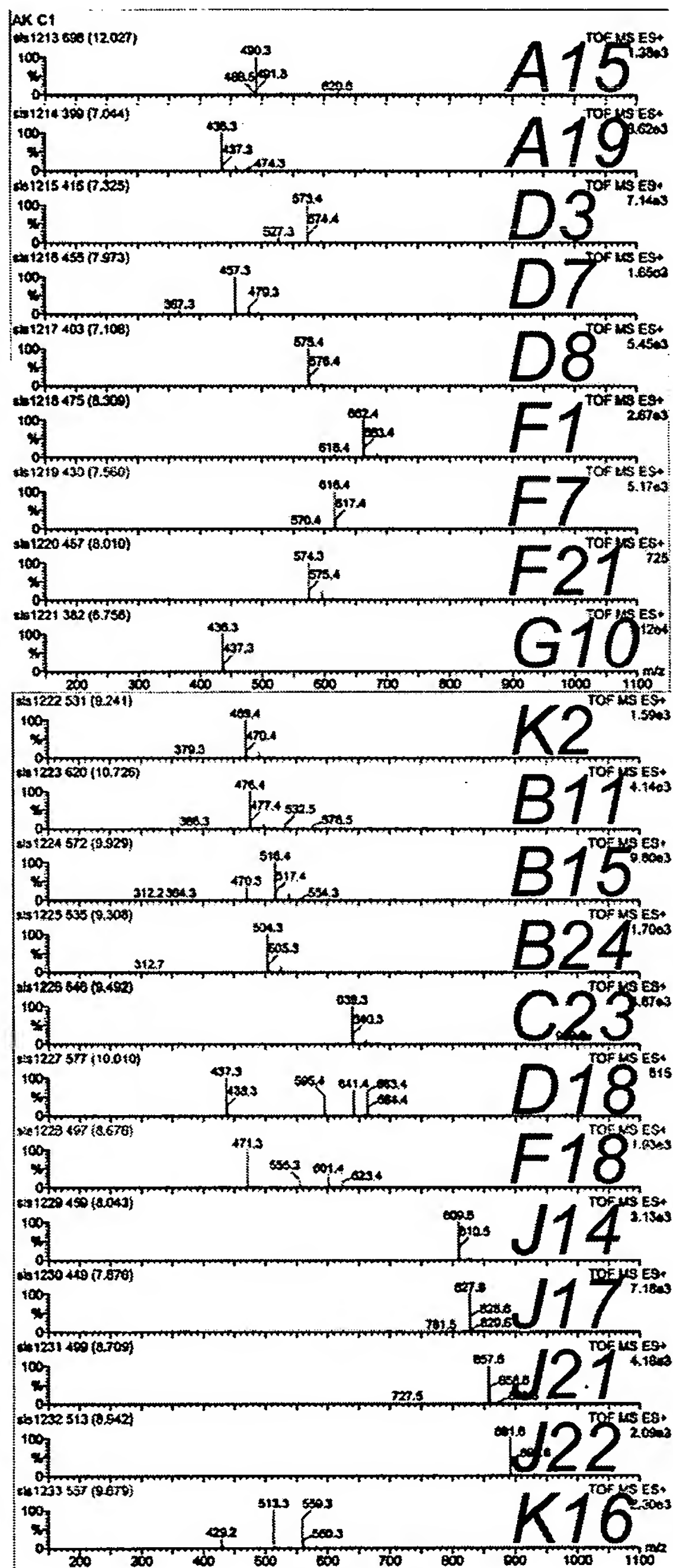
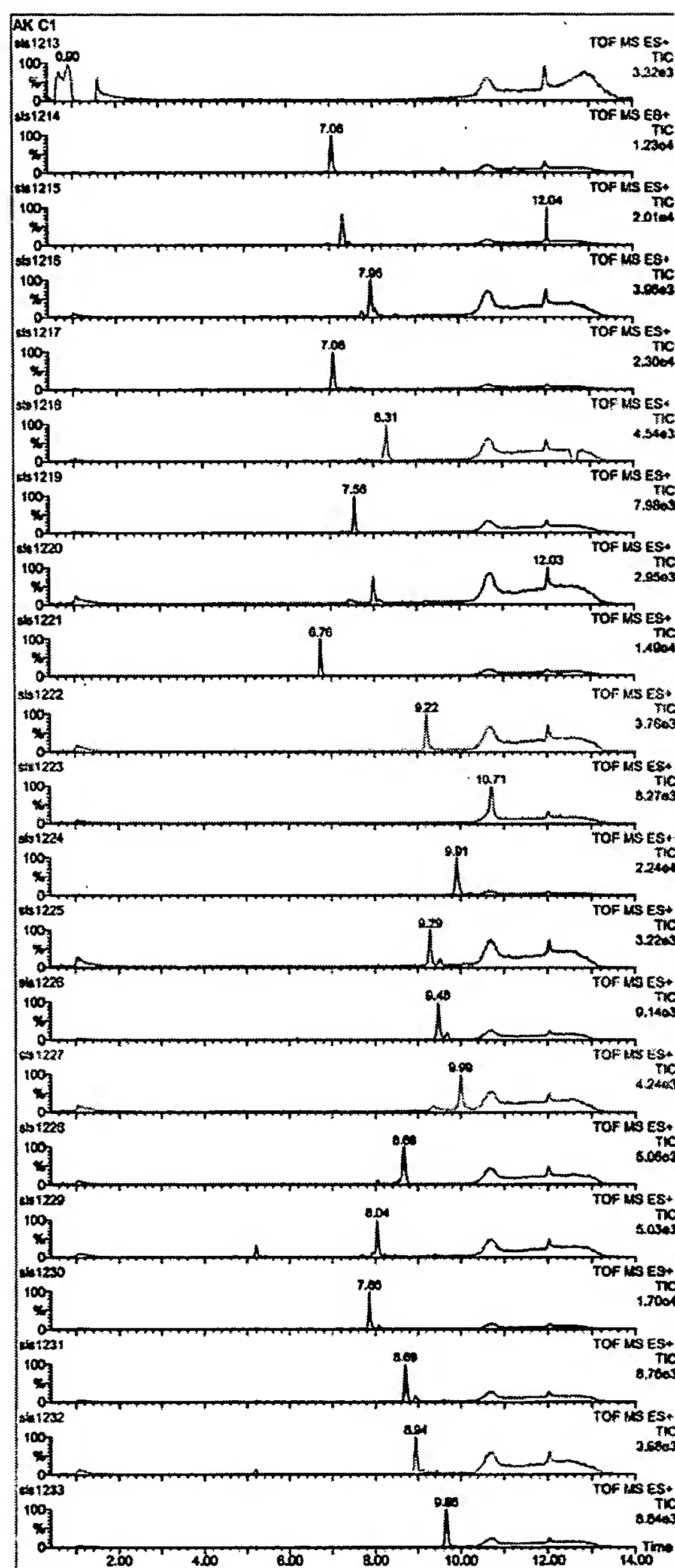
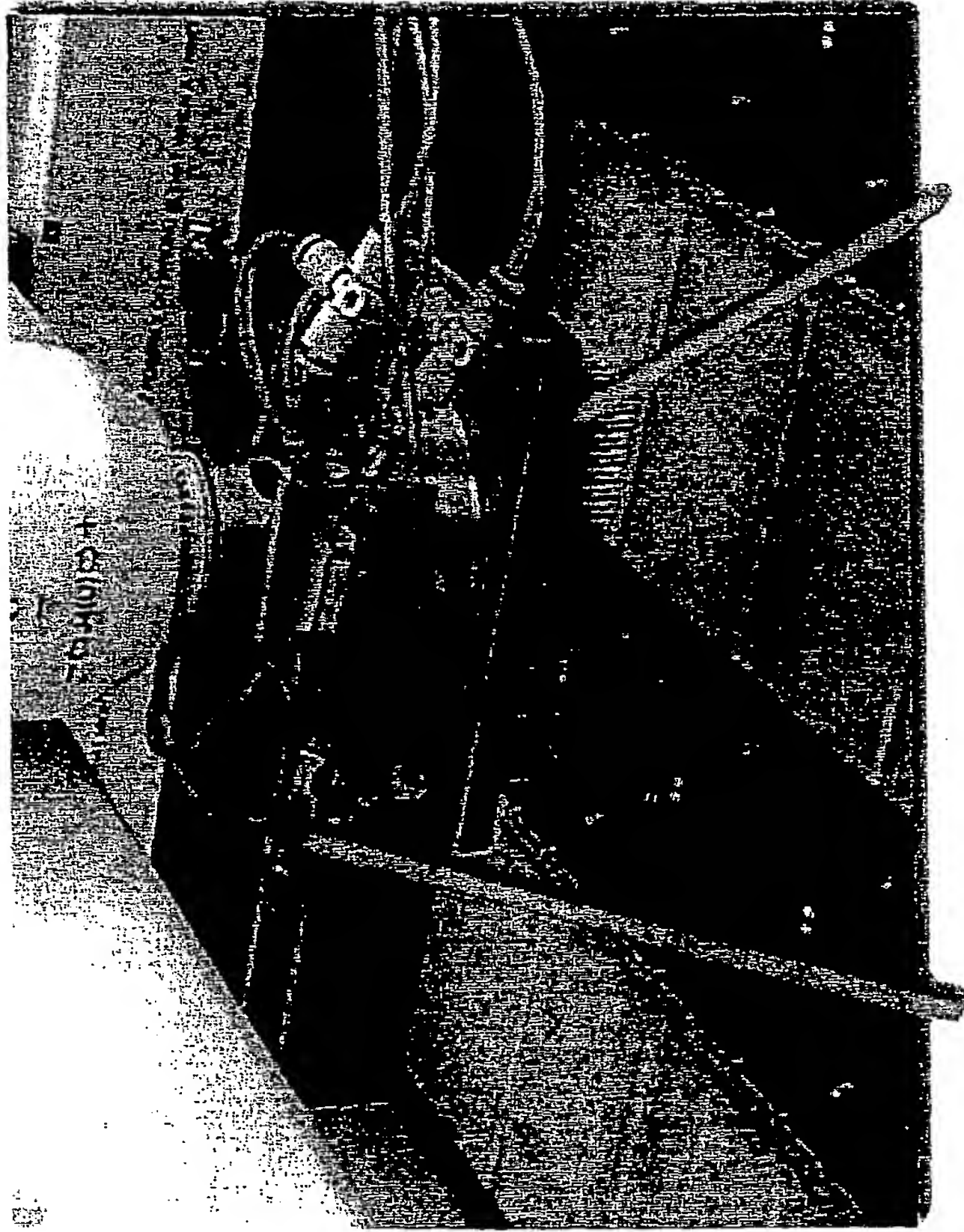


Figure 22



Rotating Vacuum  
Cups for Lid  
Removal

Pin Array

Figure 23

# Small Molecule Printing

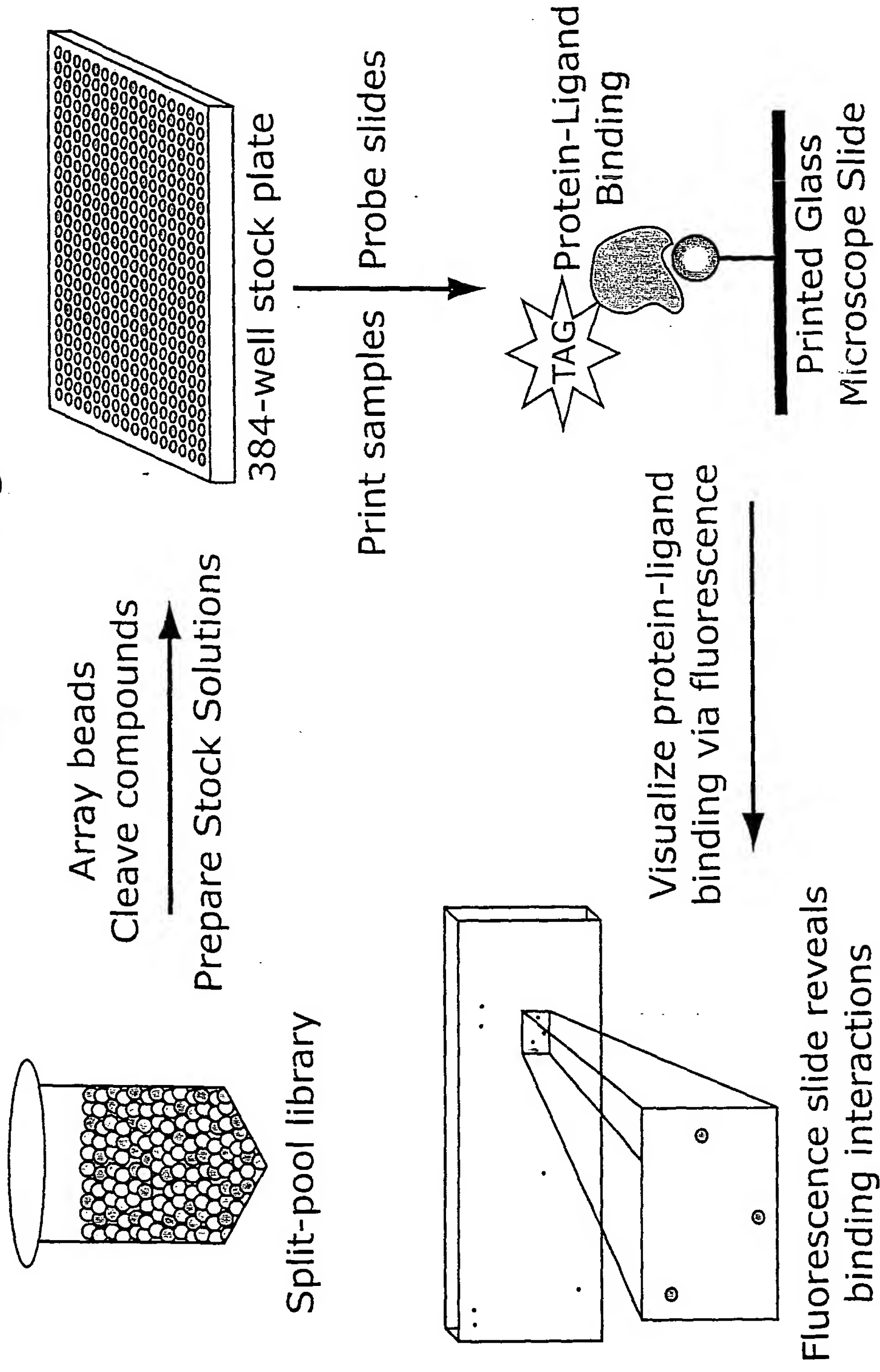
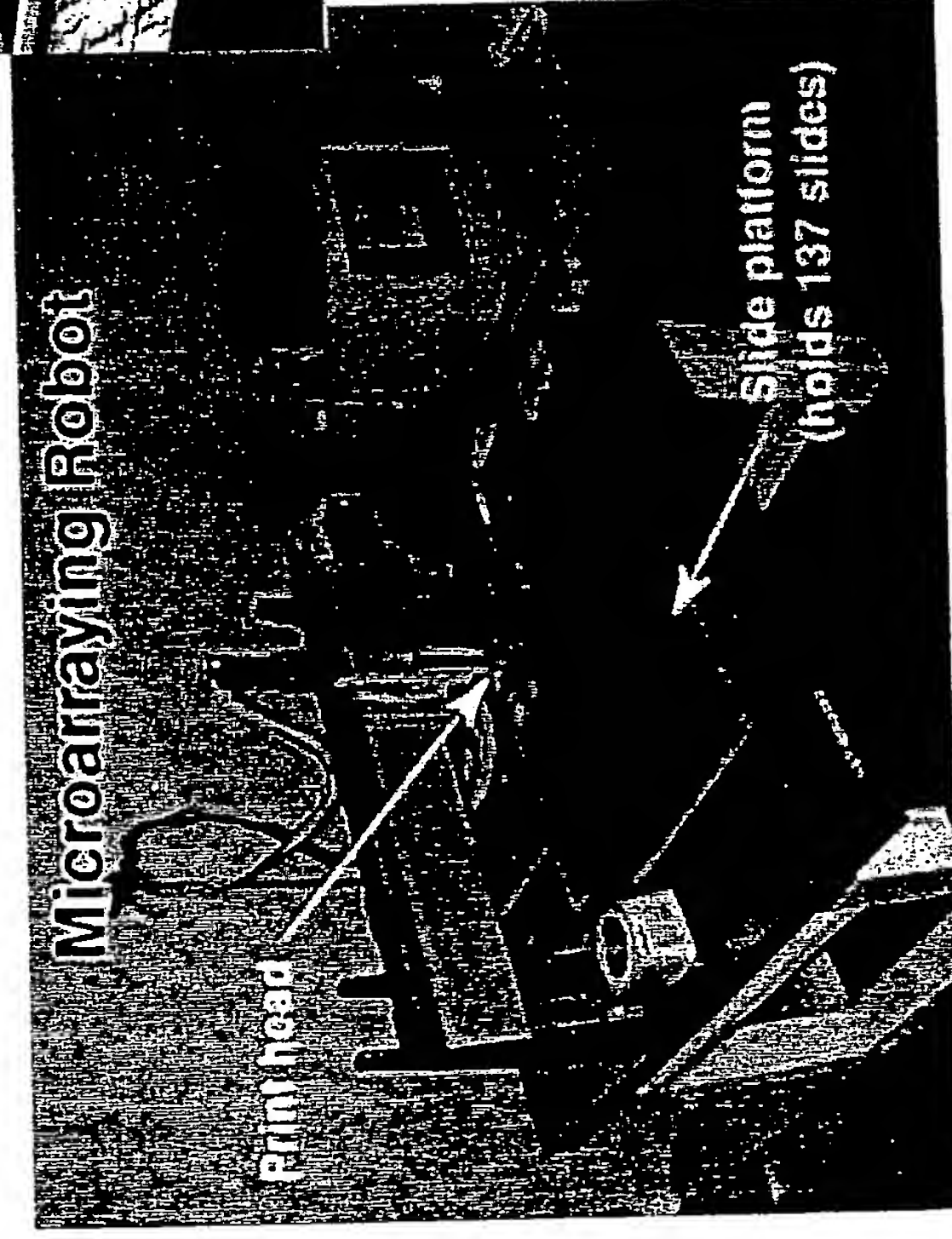
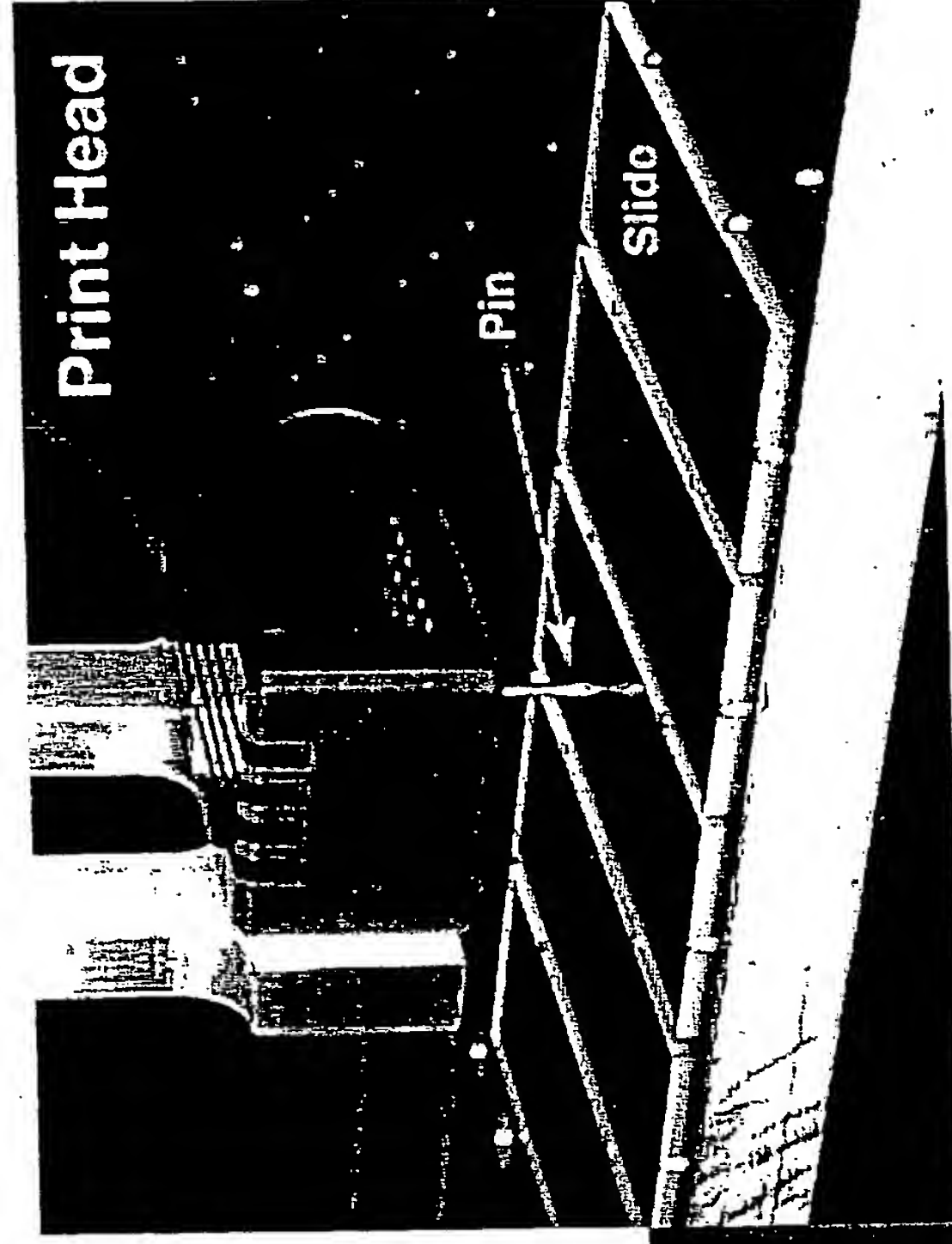


Figure 24

## Small Molecule Microarraying Robot



(built by Jeff Tong and James Hardwick)

Figure 25